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GOVERNMENT OF INDIA

RAILWAY DEPARTMENT

(RAILWAY BOARD)

REPORT
BY THE
RAILWAY BOARD
ON
INDIAN RAILWAYS
FOR
1939-40

Volume I

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1941

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(6)

Books and Technical Papers published by the Railway Board.

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(2) Classified List of State Railway Establishment and Distribution Return of Establishment of all Railways. Published yearly. Price Rs. 1-12-0 or 3*s*.

(3) History of Indian Railways, constructed and in progress corrected up to 31st March 1939. Published sexennially. Price Rs. 4-10-0 or 7*s.* 3*d*.

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(*c*) Reprints or abstracts of reports received by the Government of India on subjects connected with railways.

A complete list of the papers can be obtained *gratis* from the Chief Controller, Standardisation, Central Standards Office for Railways, Simla/New Delhi. A few of the more important Technical papers are mentioned below :—

Technical Paper.	*Name.*	*Author.*
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„ 148.	Statistics of railway working expenditure	G. DEUCHARS.
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„ 278.	Notes on Tube Railway Construction	H. G. SALMOND.
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„ 281.	The Belt System of Repairs introduced in the locomotive workshops at Kanchrapara	R. DE VERE IRWIN and J. R. POTTER.
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„ 283.	Description of a system introduced in the Stores Department of the East Indian Railway, and Appendices	F. G. S. MARTIN and A. R. A. HARE DUKE.
„ 284.	Wagon Repairs—Notes on Progressive System of Wagon Repairs as introduced in North Western Railway Workshops at Moghalpura . .	B. S. SINDHU.
„ 285.	Note on the Methods by which the provisions regarding Rates and Fares embodied in the English Railways Act of 1921 were framed, both from the points of view of the Railway Companies and of the compilers of the Act	E. A. SIMS.
„ 286.	Stresses in Fishplates for 90 lbs. Rails (with conclusions affecting the design of Standard Rail and Fishplate Sections)	A. M. SIMS.
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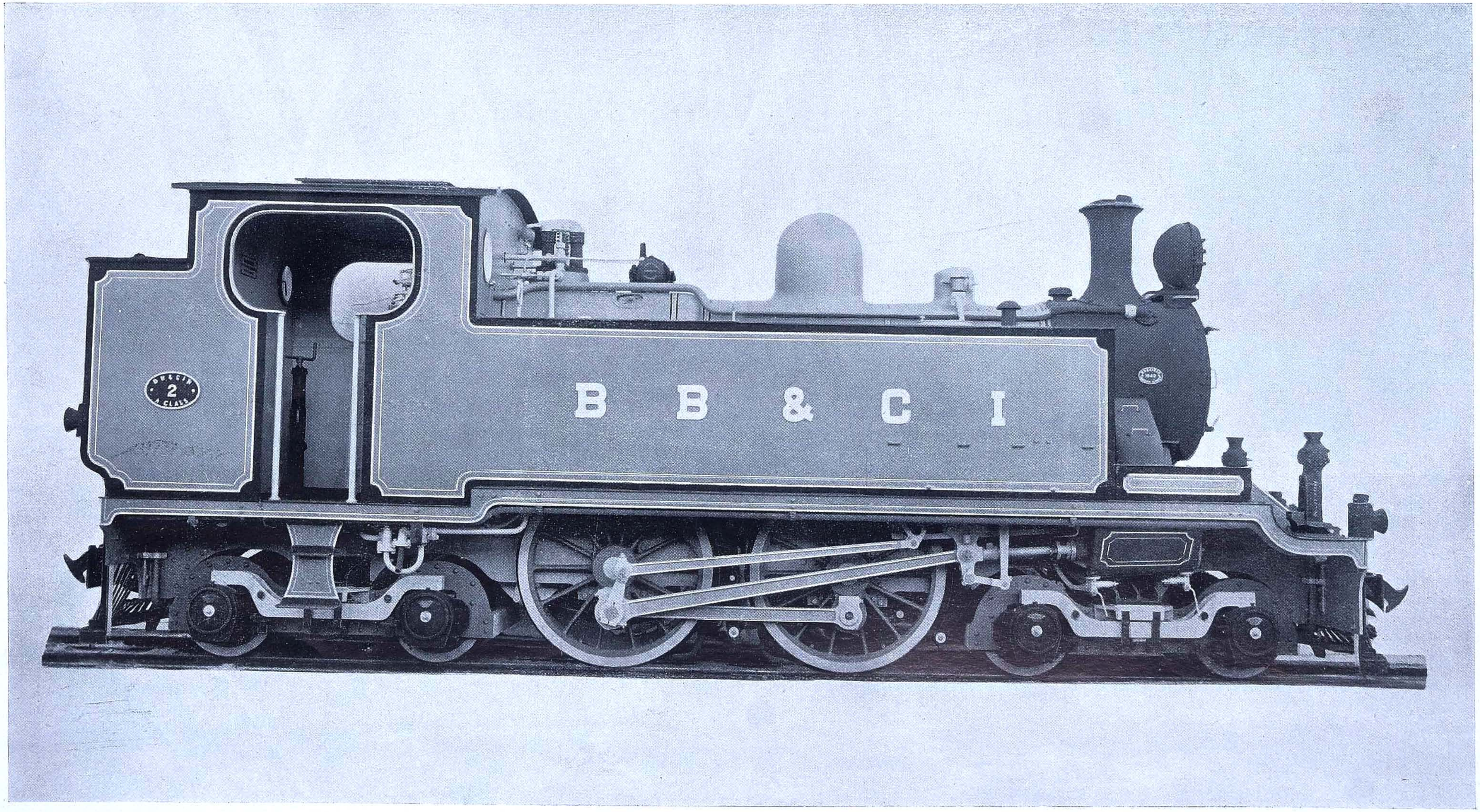
ILLUSTRATIONS

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY.

Samples of Publicity posters.

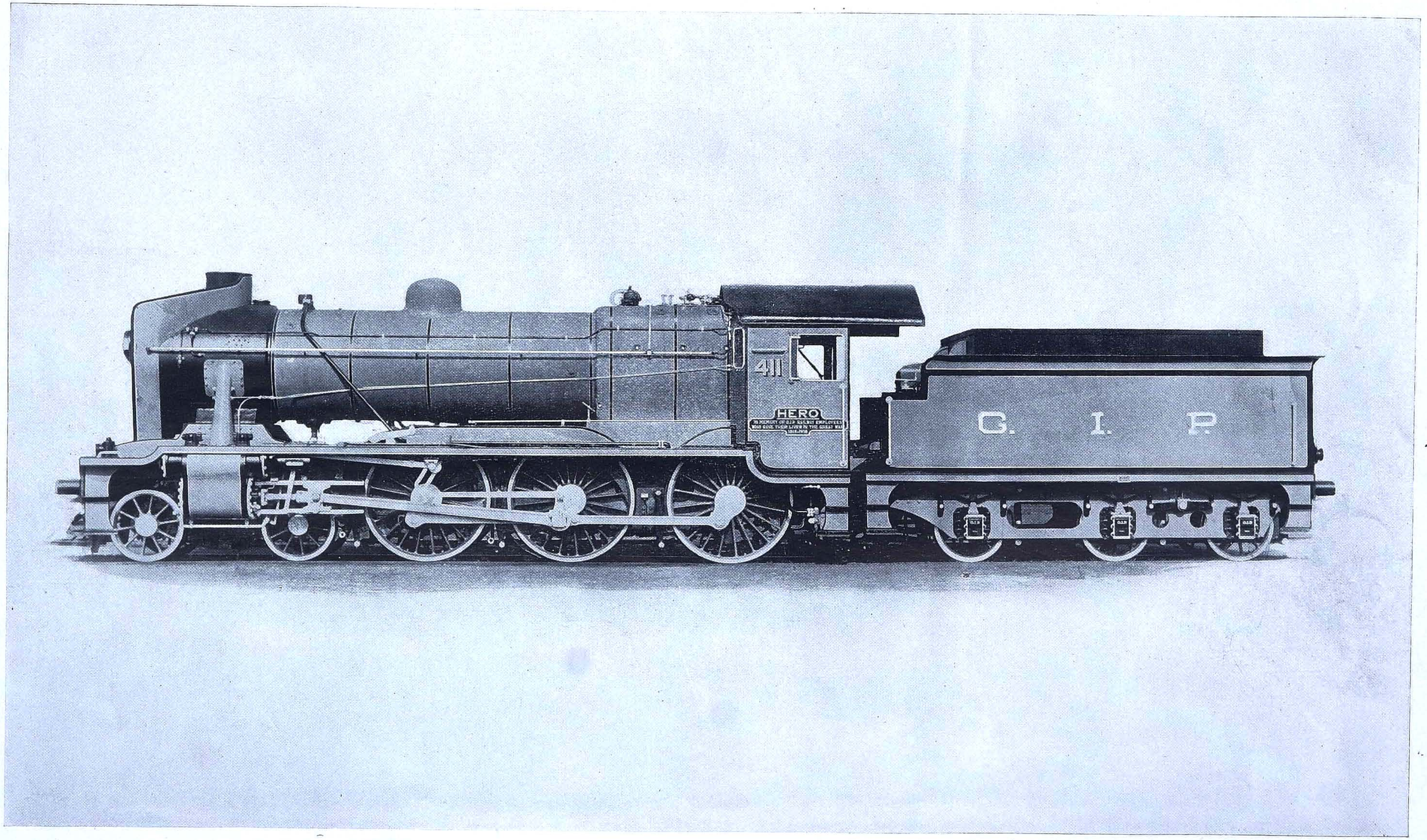
Main approach to the Patna Railway station.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY.

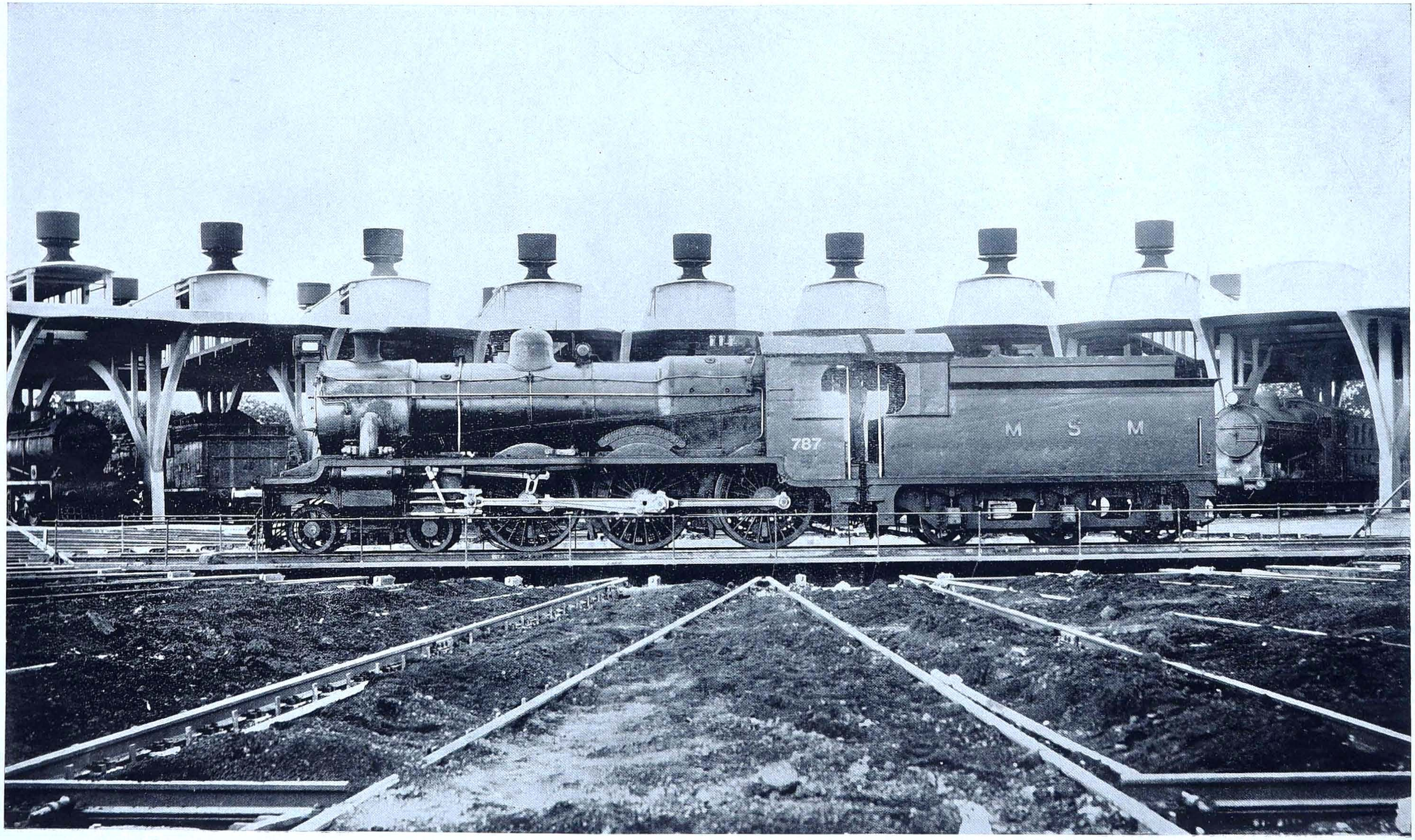


A 4-4-4 type tank locomotive.

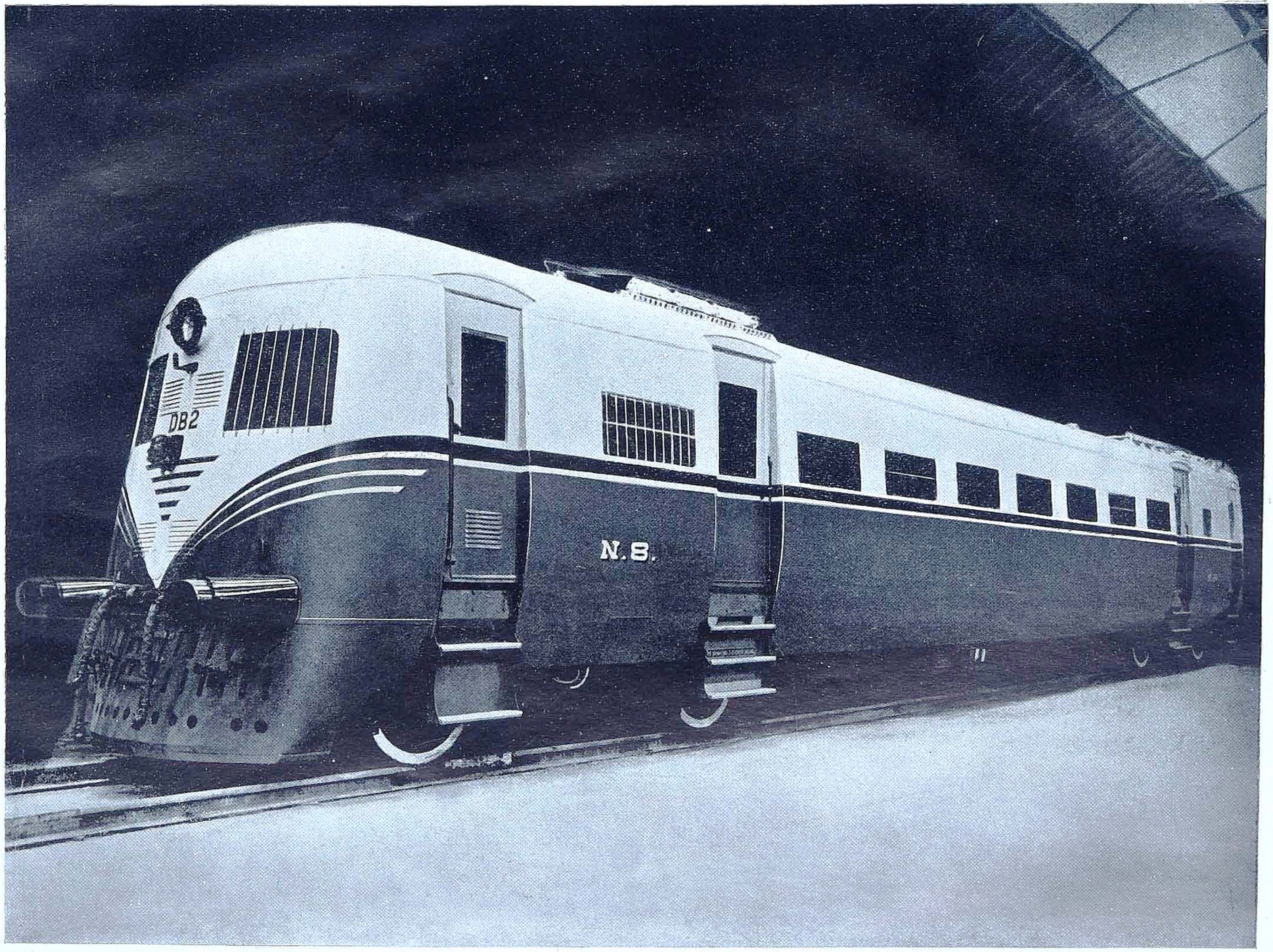
[An entirely new type which the Bombay, Baroda and Central India Railway have constructed in their workshops at Ajmer for accelerated light passenger service (3-4 bogies).]



View of the modernised D-4 locomotive No. 411.

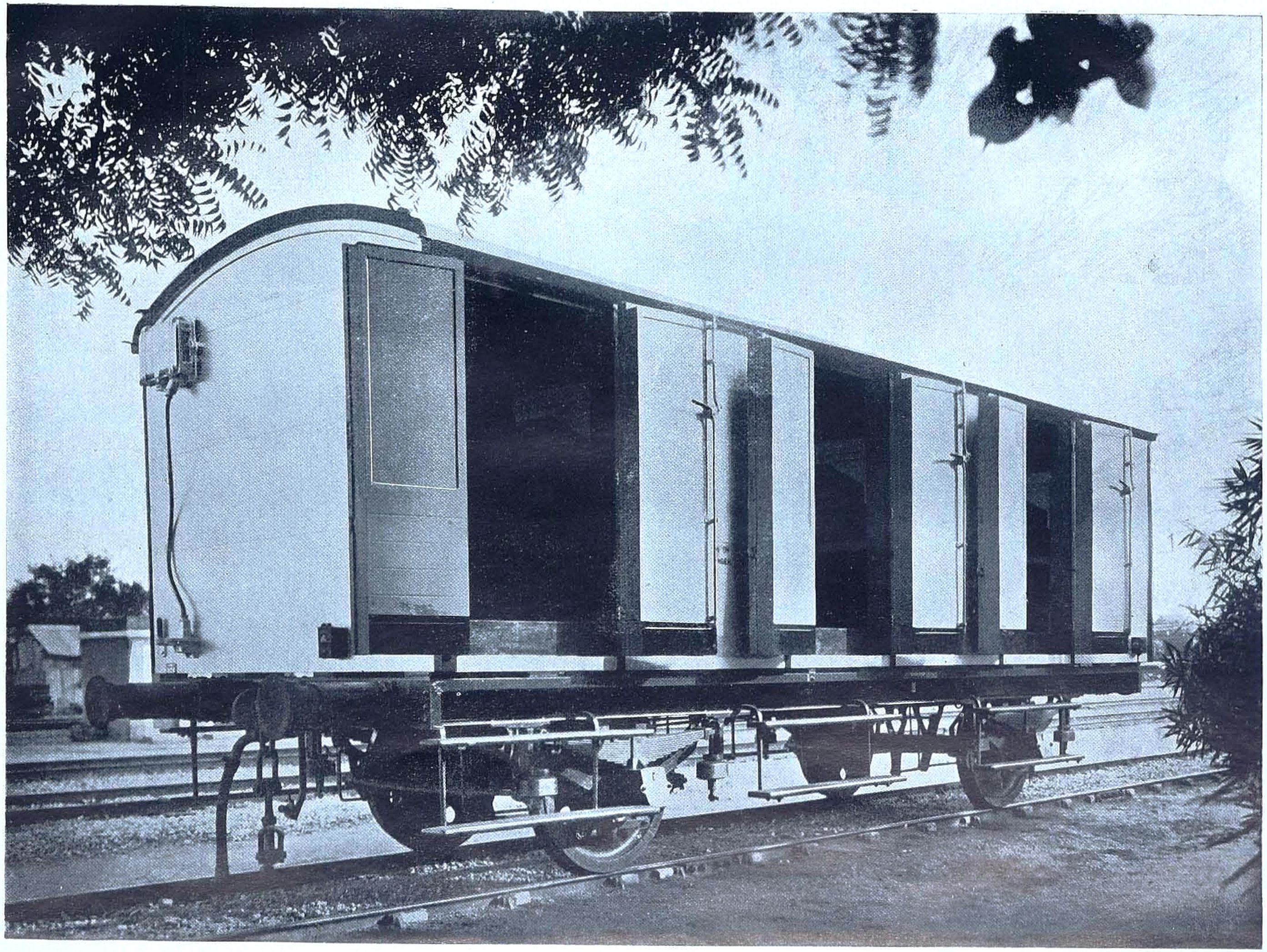


Engine on turn-table at Bitragunta engine shed ready for turning.



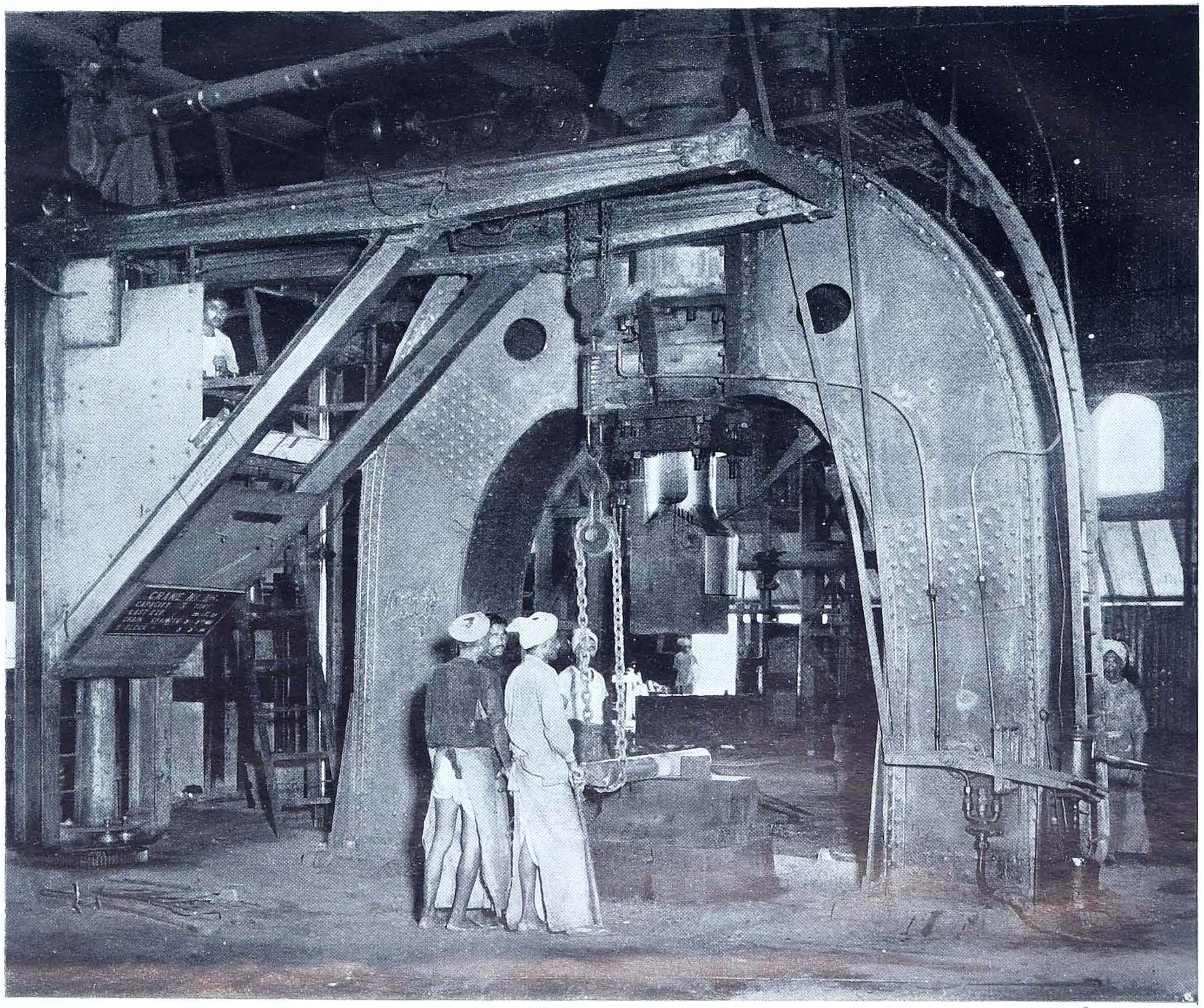
One of the four Diesel Rail Cars for III class passengers.

(Seating capacity 84 and maximum speed 52 miles per hour.)

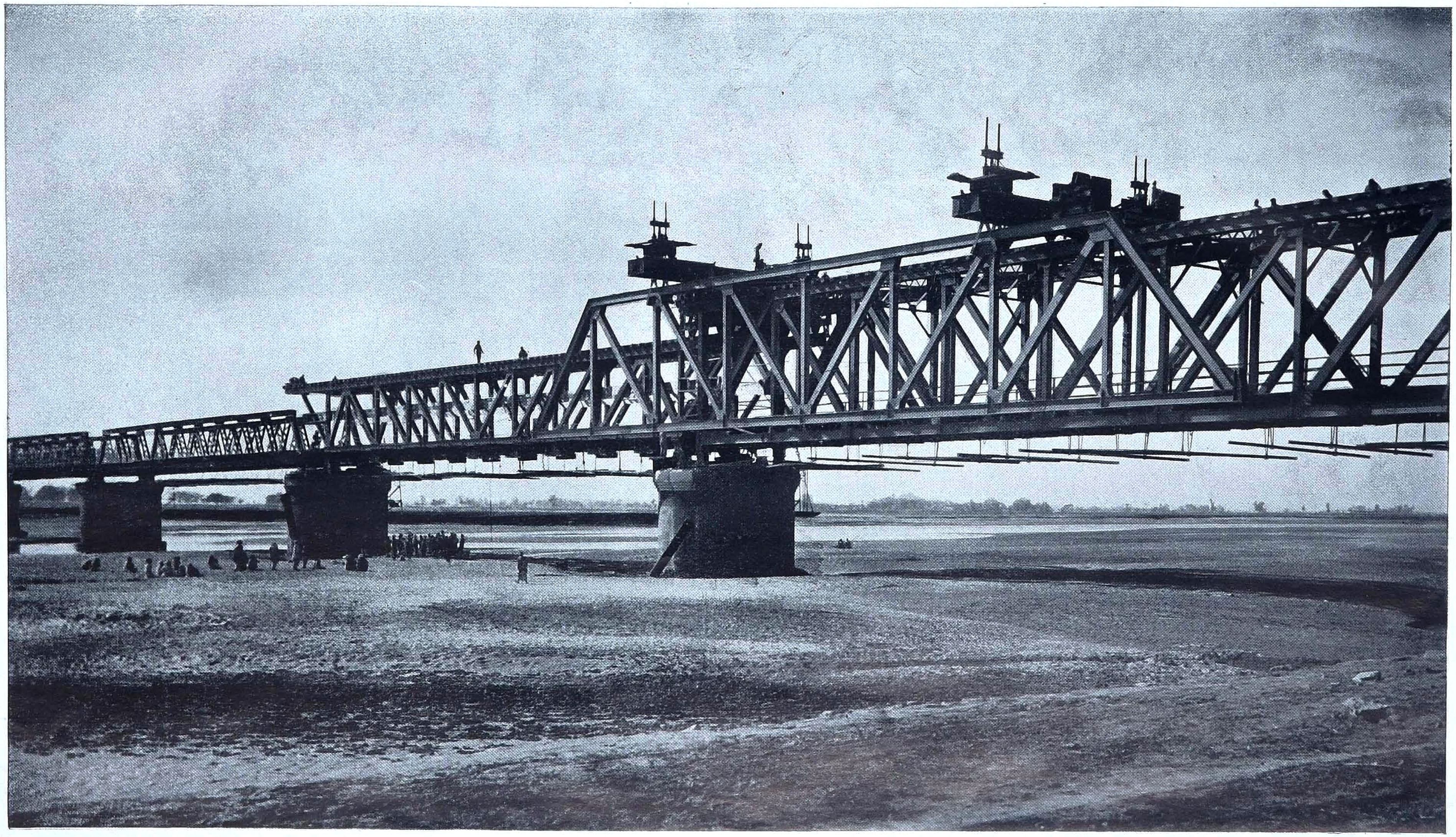


Newly constructed insulated van.

New Morris motor lorry for Express Parcel Service.

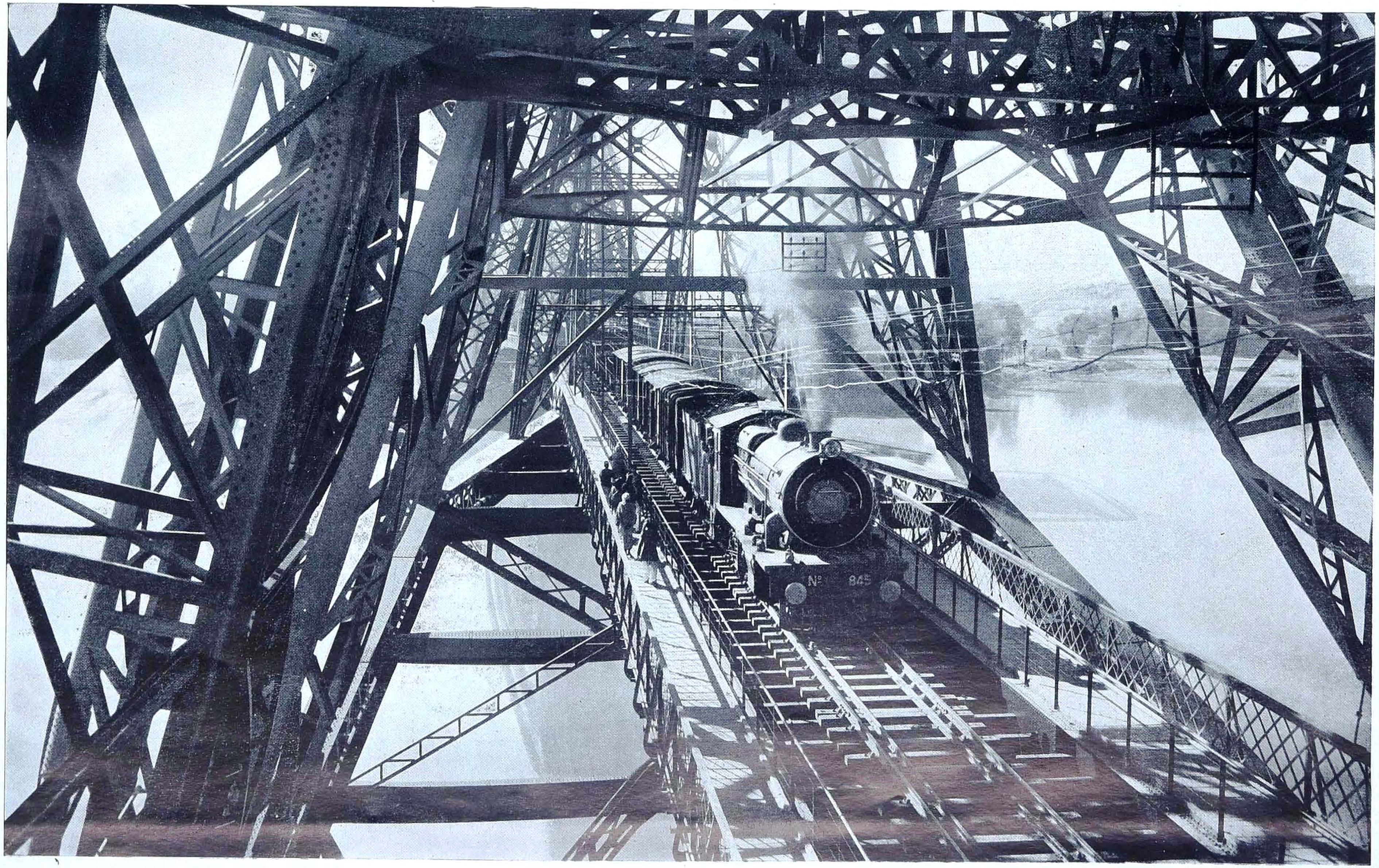


Forge shop in the Jamalpur workshops showing $3\frac{1}{2}$-ton steam hammer at work.



Victoria Bridge between Malakwal and Haranpur.

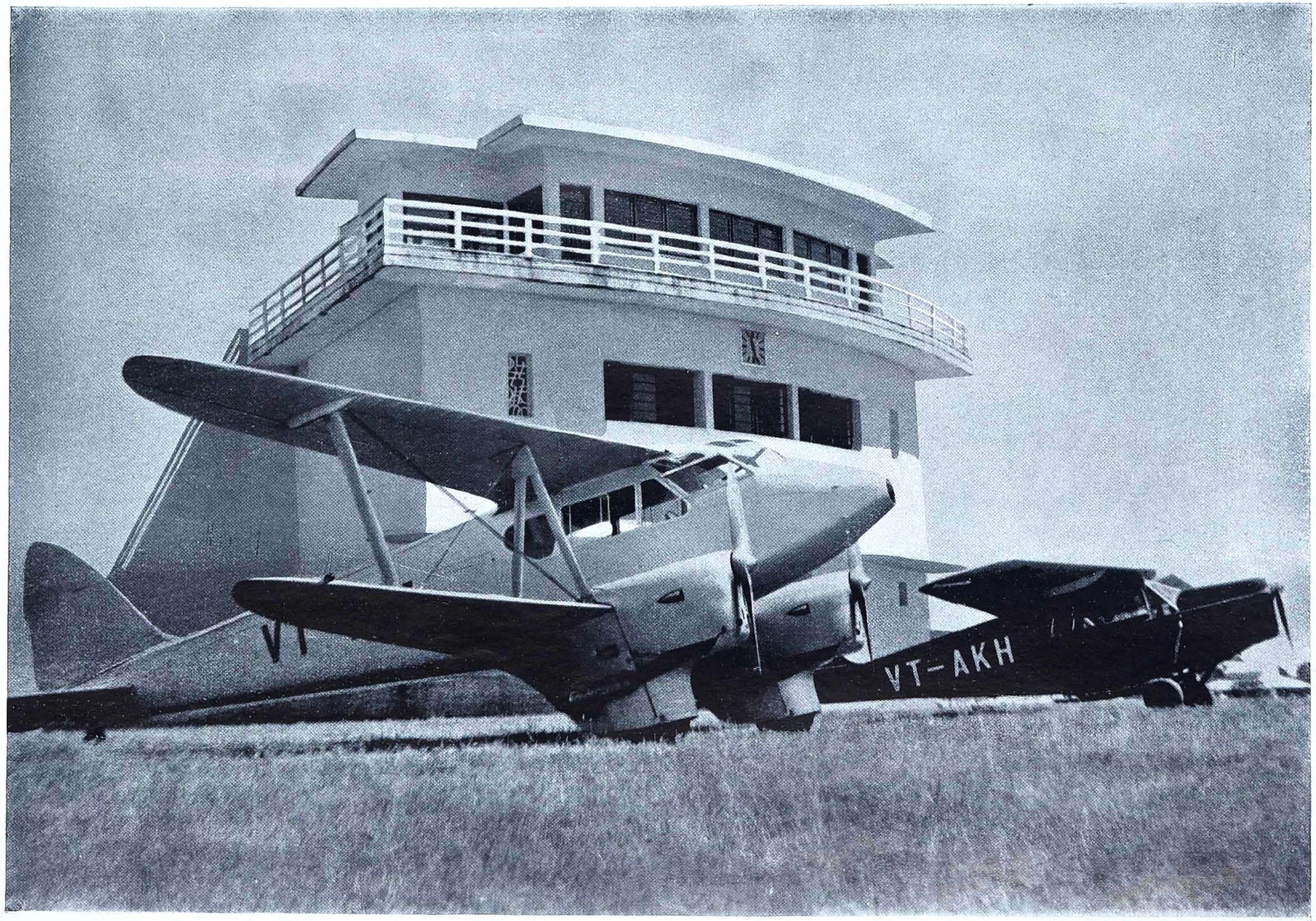
[A pair of new girders being launched during the replacement of the 17-150 feet old pony truss spans with new trough type spans—Branch Line (broad gauge) standard.]



Lansdowne Bridge at Sukkur after removal of road way.

(The dead weight of the bridge has been reduced by 180 tons, thus permitting group II engines to work trains over the bridge at 10 miles per hour.)

HIS EXALTED HIGHNESS THE NIZAM'S STATE RAILWAY.



Airport building at Begampet in Hyderabad-Deccan.

Main statistics compared for four years.

I.—*All Indian railways* (*Classes I, II and III*).

Items.		1936-37.*	1937-38.	1938-39.	1939-40.
Gross earnings	(crores) Rs. .	104·37	107·57	107·15	**111·50**
Total Working expenses	(crores) Rs. .	67·28	69·63	71·18	**72·20**
Operating ratio	Per cent. .	64·46	64·73	66·44	**64·75**
Number of passenger originating . . .	(millions) .	489·61	521·28	530·62	**529·67**
Earnings from carriage of passengers . .	(crores) Rs. .	29·37	31·08	30·73	**30·47**
Average earnings per passenger mile . .	Pies .	3·17	3·17	3·15	**3·16**
Freight tons originating	(millions) .	82·41	87·29	88·36	**92·18**
Earnings from carriage of goods . . .	(crores) Rs. .	67·33	68·66	68·57	**72·56**
Average earnings per freight ton mile . .	Pies .	6·22	5·78	5·98	**5·93**
Total train miles	(millions) .	181·73	192·20	197·04	**198·84**
Gross earnings per train mile	Rs. .	5·72	5·57	5·40	**5·64**
Working expenses per train mile . . .	Rs. .	3·68	3·61†	3·58	**3·65**
Net earnings per train mile	Rs. .	2·04	1·96†	1·82	**1·99**
Net earnings per mean mile worked . . .	Rs. .	8,911	9,043†	8,619	**9,427**

† Revised figures.

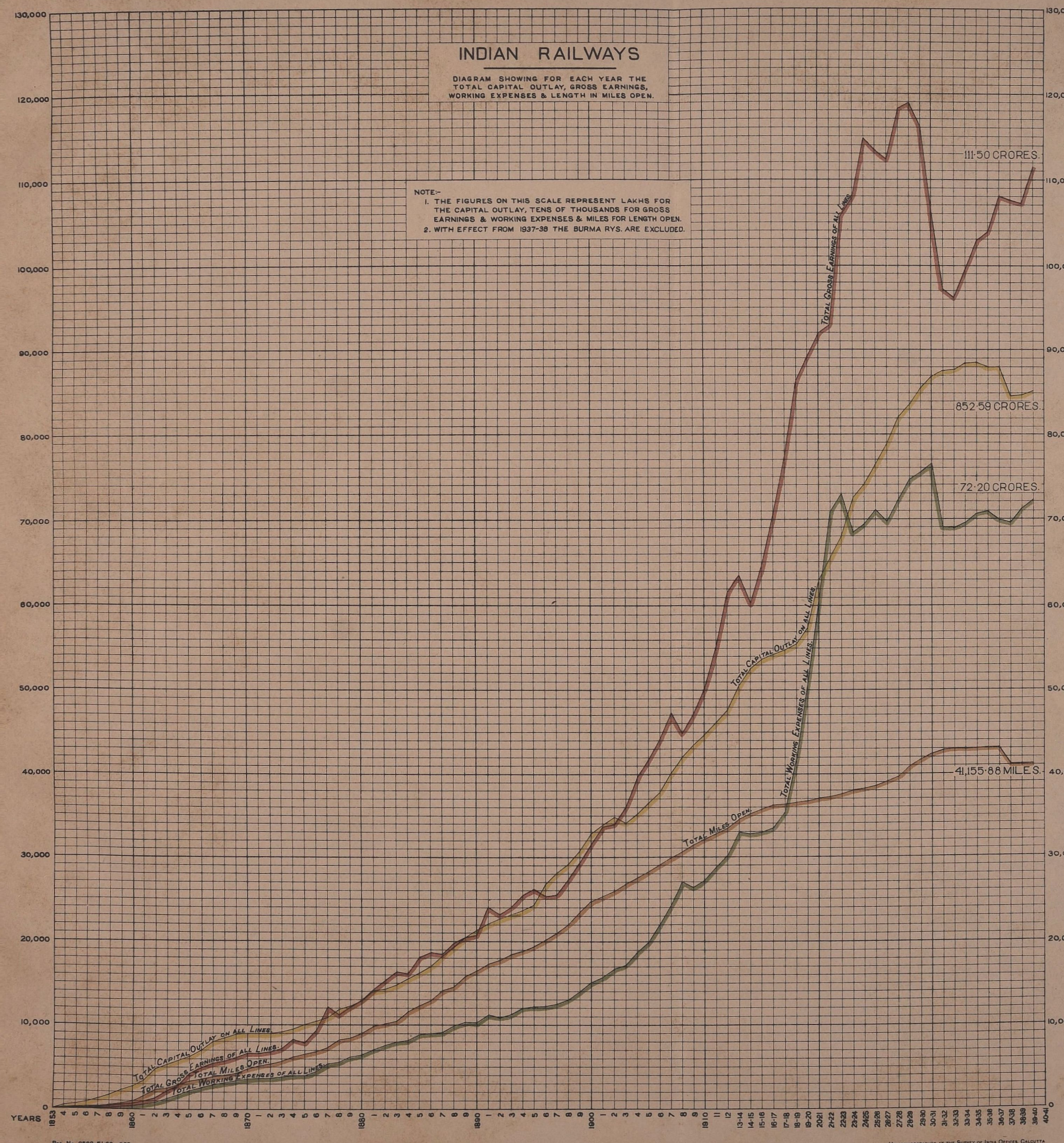
NOTE.—The figures of Gross Earnings, Working Expenses and Net Earnings for 1938-39 include the Jorhat Railway and replacement and renewal expenditure on the Bengal and North-Western and Rohilkund and Kumaon railways (Company's share) which items were omitted in previous years.

II.—*State-owned railway systems.*

(The figures include statistics of worked lines of State-owned railways but exclude State-owned portions worked by the Jodhpur and His Exalted Highness the Nizam's State Railways.)

Items.		1936-37.*	1937-38.	1938-39.	1939-40.
Gross earnings	(crores) Rs. .	97·14	99·83	99·07	**103·02**
Total Working expenses	(crores) Rs. .	63·02	65·30	66·38	**67·22**
Operating ratio	Per cent. .	64·88	65·41	67·00	**65·25**
Number of passengers originating . . .	(millions) .	443·10	471·18	477·97	**477·13**
Earnings from carriage of passengers . .	(crores) Rs. .	26·72	28·27	27·89	**27·65**
Average earnings per passenger mile . . .	Pies .	3·13	3·13	3·11	**3·12**
Freight tons originating	(millions) .	75·64	80·12	80·56	**84·15**
Earnings from carriage of goods . . .	(crores) Rs. .	63·31	64·33	63·95	**67·55**
Average earnings per freight ton mile . .	Pies .	6·09	5·66	5·80	**5·79**
Total train miles	(millions) .	166·00	175·53	179·05	**180·44**
Gross earnings per train mile	Rs. .	5·83	5·66	5·51	**5·71**
Working expenses per train mile . . .	Rs. .	3·78	3·70	3·69	**3·73**
Net earnings per train mile	Rs. .	2·05	1·96	1·82	**1·98**
Net earnings per mean mile worked . . .	Rs. .	9,966	10,082	9,613	**10,577**

* Excluding for purposes of comparison the Burma Railways which passed from the control of the Indian Government on 1st April 1937.



REG. No. 2569. E' 26.–962.

HELIOZINCOGRAPHED AT THE SURVEY OF INDIA OFFICES, CALCUTTA

INTRODUCTORY NOTE.

1. The Railway Board's annual report on Indian Railways is prepared for the financial year, *i.e.*, from 1st April of one year to the 31st March of the year following.

Volume I is a narrative report dealing with the various aspects of railway working such as general administration, financial results, improvements in, and additions to, rolling stock, commercial and operating methods, recruiting, training and welfare of staff and facilities provided for the convenience of the travelling public.

Volume II contains financial and statistical summaries and statements covering the main heads of capital and revenue accounts and the complete range of railway working.

2. For the information of those who are not conversant with the value of Indian currency and the units thereof, the following details are given :—

(*a*) One *lakh* equals one hundred thousand.

(*b*) One *crore* equals one hundred lakhs.

(*c*) One *anna* equals $\frac{1}{16}$th of a rupee.

(*d*) One *pie* equals $\frac{1}{12}$th of an anna.

The approximate value in English coinage of a rupee at the present rate of exchange is one shilling and six pence.

3. For statistical purposes, Indian railway systems are classified as follows :—

Class I—Railways with gross earnings of not less than Rs. 50 lakhs a year.

Class II—Railways with gross earnings of less than Rs. 50 lakhs a year, but exceeding Rs. 10 lakhs.

Class III—Railways with gross earnings of not more than Rs. 10 lakhs a year.

(A detailed list of the railways in each class will be found in Appendix A of this volume).

4. Notes on—

(*a*) Relations of the Government of India to the Railways in India,

(*b*) Organisation for Government control, and

(*c*) Government of India, Railway Department's Resolution No. 2131-F., dated the 19th February 1925 on the subject of financing branch lines of Railways,

which used to appear as Appendices B, C and E to this volume have been deleted in this year's Report and

the staff statements showing the number of Gazetted Officers and Senior Subordinates and number of appointments made to the Superior and Subordinate services, which used to constitute Appendices F, G (i) and G (ii) to this volume have been incorporated as Appendices C (iv) and C (v) to Volume II of this Report.

The following is a brief synopsis of some of the major items of interest in this report, together with a reference, in each case, to the page in the report on which the details are given :—

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MAP.

India showing railways open and under construction on 31st March 1940 . In the pocket of the back cover.

CHAPTER I.

GENERAL REVIEW.

1. Monsoon conditions and agricultural results.—Agriculture being the principal industry of the country, the fortunes of the railways are largely dependent on its prosperity which is mainly determined by the conditions of rainfall. A prefatory note is therefore necessary on the incidence and effectiveness of the monsoon rainfall.

The monsoon of 1939 set in at the beginning of June, but the distribution of rainfall was affected by a break in the main current for about three weeks from the 20th July and the generally feeble monsoon current from the Arabian Sea. The monsoon rainfall was, in consequence, markedly deficient in north-west India and moderately so in the eastern half of the peninsula, while maintaining generally its normal course over the rest of the country. Averaged over the plains of India, the total rainfall during the period was in defect of the normal by 7 per cent., while during the retreating period it was in excess of the normal by 9 per cent. Taking the year as a whole the rainfall was within 20 per cent. of the normal, except in the Punjab, Sind, Rajputana, Gujarat and north Hyderabad where it was defective to an appreciably greater degree.

From the agricultural aspect, the season must be generally considered favourable. The variations in the main crops are as indicated below :—

Increases—

Rice 6 per cent. better than the previous season though slightly below the average of the preceding five years.

Sugarcane 34 per cent. more than the preceding season's crop and 3 per cent. better than the average of the preceding five years.

Jute 41 per cent. increase over the previous season in spite of slightly reduced acreage.

Sesamum 5 per cent. better than the preceding year.

Decreases—

Cotton 3 per cent.
Groundnut 7 per cent.
Castor seed 15 per cent.
} less than in 1938-39.

Wheat (1938-39 crop) 8 per cent. less than in 1937-38.

Linseed (1938-39 outturn) 4 per cent. less than in the previous season.

Rape and mustard (1938-39 outturn) 10 per cent. less than in the previous season.

Famine conditions prevailed in the Karimnagar, Raichur, Gulbarga and Warrangal districts of His Exalted Highness the Nizam's Dominions, Chingleput District of the Madras Presidency, Kathiawar and Rajputana areas and certain districts of the Punjab and Delhi area.

2. Receipts.—The gross traffic receipts of State-owned railways for the year 1939-40 amounted to Rs. 97·65 crores as compared with Rs. 94·48 crores in 1938-39, an increase of Rs. 317 lakhs. After meeting all charges including depreciation and interest on capital at charge, the year's working indicated a gain of Rs. 433 lakhs. This surplus was placed to the credit of the general revenues of the Central Government in part payment of the contribution of Rs. 463 lakhs due from railways for 1939-40.

On a comparison of the results of all Indian Railways with 1938-39, the number of passengers carried, passenger miles and earnings from

passengers showed a slight falling off. On the other hand goods traffic results showed an improvement over the previous year. The figures are as follows :—

Items.	1938-39	1939-40	Percentage difference.
Number of passengers carried (in millions)	530·6	**529·7**	—0·17
Passengers miles (millions)	18,743	**18,522**	—1·18
Earnings from passengers (Crores)	Rs. 30·73	**30·47**	—0·85
Average rate charged per passenger per mile	Pies 3·15	**3·16**	+0·32
Average miles a passenger was carried	Miles 35·3	**35·0**	—0·85
Freight tons carried (millions)	88·4	**92·2**	+4·30
Net ton miles (millions)	22,159	**23,493**	+6·02
Earnings from goods carried (Crores)	Rs. 68·57	**72·56**	+5·82
Average rate charged per ton per mile	Pies 5·98	**5·93**	—0·84
Average miles a ton of goods was carried	Miles 250·8	**254·9**	+1·63

3. Mileage.—71 miles of new railway lines were opened during the year, of which 21 miles were constructed in the province of Sind by the Government of India and the balance within Indian States built at the cost of the Durbars concerned. As against this the mileage of the existing lines was reduced by approximately forty-nine miles as follows :—

(i) dismantling of lines between Nirmali and Supaul and lifting of ghat lines, realignment, etc., on the Bengal and North-Western Railway (32 miles);

(ii) closing of Trivellore Light Railway (2 miles);

(iii) closing of Agra-Hat-Shamsabad section on the Great Indian Peninsula Railway (12 miles);

(iv) minor reductions due to remodelling and re-alignment on other railways (3 miles).

The net addition to the open mileage during the year was thus only 22 miles.

4. Railways and the Legislature.—Judging from the number of questions asked in the Council of State and the Legislative Assembly, it will appear that the members of the Indian Legislature continued, as in the past, to take a keen interest in the working of the Railway Department. Out of a total number of 1,226 questions asked in both the Houses during the year 1939-40, 488 or 39 per cent. were answered by the Railway Department as compared with 1,127 or 26 per cent. during the previous year.

In addition to this large number of questions the following resolutions were also discussed either in the Legislative Assembly or in the Council of State :—

4.1. Committee to enquire into the general administration of the East Indian Railway.—On the 18th September 1939 Shaikh Rafiuddin Ahmad Siddiquee moved in the Legislative Assembly a resolution recommending the appointment of a committee of railway experts and representatives of the public, to enquire into the affairs and general administration of the East Indian Railway and suggest ways and means for bringing up its efficiency of working to the level obtaining at the time of its transfer to State management.

In moving the resolution it was stated that even as late as 1924, immediately before the East Indian Railway was taken over by the State, the company was solvent and paying dividend to its shareholders. There were no complaints regarding accidents, inefficiency of supervising staff and discontent on the grounds of communal prejudices. The general administration was

less expensive and the purchase of locomotives was conducted economically under expert advice. There was prompt settlement of claims for damages to goods and comparatively greater security of service for employees in the lower grades. These conditions, it was alleged, disappeared after the railway came under State management.

In opposing the resolution, the Honourable Sir Andrew Clow pointed out that the change from Company to State management was at that time welcomed by the House. Subsequent to the transfer, there was an amalgamation of the East Indian and Oudh and Rohilkhand railways and a good deal of further re-shuffling of branch lines, which had far reaching effects on traffic. For example it was possible to run important through trains from Howrah to Saharanpur on one administration whereas formerly two railways competed across the greater part of the United Provinces. From the staff point of view, there could not be any grounds for complaint as the staff are recruited in accordance with the policy of Indianisation in the higher ranks and communal representation in recruitment. The staff are also paid better and improvements have been made in the hours of working of the staff. The immense expansion of the road services in recent years, over which the railways had no control, has to some extent adversely affected the financial position of not only all the railways in India but also leading railways in the world. In spite of these changes the overhead costs of the East Indian Railway in 1937-38 had decreased as compared with 1925-26. The number of claims for goods lost or damaged in 1938-39 was only a tenth of what it was in 1924-25. The improvement in operating efficiency was indicated by the quotation of relevant statistical data. In the circumstances a committee of the kind proposed could not throw any real light on or give any assistance in dealing with the problem.

The motion was negatived.

4.2. Loans from railway depreciation fund and arrear contributions to the general revenues.—The following resolution was moved by the Honourable the Finance Member on the 4th September 1939 in the Legislative Assembly :—

> " That this Assembly recommends to the Governor General in Council that railway revenues be declared not liable, before the 1st April 1942, or before the fixation under section 187 (1) of the Government of India Act, 1935, of the sum therein referred to, whichever is earlier, to repay to the Depreciation Reserve Fund maintained for Indian State-owned railways, the balance outstanding on the 1st April 1937, of loans taken from the fund to meet railway deficits or to pay to general revenues any contributions or deficiency in contributions due under the Resolution of this Assembly of the 20th September 1924, in respect of the period beginning on the 1st April 1931 and ending on the 31st March 1939."

In moving the resolution the Finance Member pointed out that an almost identical resolution was adopted on the 7th October 1937, but it had effect only upto 31st March 1940. The house had, therefore, to consider what arrangements should be made in regard to the payment of arrears to the depreciation fund and to general revenues. It was further pointed out that, if decision was not taken on the lines of the proposed resolution the result would be that any surplus earned by railways would have to go straight into the depreciation fund and no amount could accrue to the general revenues until the whole amount of the loan taken from the fund had been paid back to the depreciation fund. As a consequence the House would, in view of the Niemeyer award, be faced with the problem of raising an amount equal to the railway surplus by new taxation from the tax-payer, a position which was not likely to be acceptable to the House.

During the debate on the resolution most of the discussion centred on the railway financial policy. In his reply to the debate, the Finance Member

made it clear that that was not an appropriate occasion for a review of railway finances. The resolution was then put to the vote of the Assembly and adopted.

4.3. Pacific Locomotive Committee.—The Pacific Locomotive Committee's Report on the working of the Pacific types of locomotives on Indian Railways was debated by the Legislative Assembly and the Council of State on the 11th and 18th September 1939, respectively. A pamphlet detailing the recommendations of the committee and a brief indication of the action taken or contemplated thereon by the Railway Board was also circulated to the members of both the Houses.

4.4. Manufacture of Locomotives in India.—The following resolution was moved by the Honourable Mr. V. V. Kalikar in the Council of State on the 20th September 1939 :—

> " This Council recommends to the Governor General in Council to take early steps for manufacturing railway locomotives in India."

After the supporting speeches, Government moved an amendment thereto and the following amended resolution was adopted by the House :—

> " This Council recommends to the Governor General in Council that the Railway Board should take early steps to carry out a thorough investigation into the possibilities of building locomotives in India and to submit a report."

4.5. Railway Inspectorate.—On the 11th March 1940 a resolution was moved in the Council of State by the Honourable Mr. P. N. Sapru that Senior Government Inspectors of Railways be placed under the administrative control of some authority of the Government of India other than the Railway Board and was adopted by the House. The question of establishing an inspecting cadre administratively responsible to Government through a Department other than the Railway Department and composed of officers entirely independent of the Railway Board and of any railway administration was under active consideration at the close of the year.

4.6. Catering arrangements on railways.—The question of catering arrangements for railway passengers which has received so much public attention within recent years was the subject of a resolution moved by Dr. Sir Ziauddin Ahmad in the Legislative Assembly on the 8th February 1940. The resolution read as follows :—

> " That this Assembly recommends to the Governor General in Council to fix without delay definite principles for the sale of food on railway stations and in running trains and end the discussions on the subject in Railway Advisory Committees and terminate the continuous experiments by railway officials."

The mover referred to the past discussions on the subject in the Assembly and finally enunciated certain principles which he suggested should be followed in making arrangements for the sale of food on railways. These briefly summarised were :—

(i) that railways should not make a profit and that only a nominal rent or nominal fees for licences should be recovered from contractors;

(ii) that the price of the foodstuffs sold should be fair; and

(iii) that there should be no monopoly of contracts and that contracts should be given to local persons as far as possible.

The Honourable Member for Railways expressed his hesitation in laying down principles that would be acceptable for all time on a matter of the kind under discussion, but explained the views of Government on each of the points referred to above. He stated that, although there had been attempts in the past to treat the question of catering contracts on commercial lines, Government had in pursuance of the advice of the Central Advisory

Council abandoned that policy. This however, did not mean that railways should not charge a reasonable rent or impose a licence fee, provided they were not making this a source of substantial profit.

As regards prices, while he agreed that these should be reasonable, he dissented from the views of certain speakers who stated that the prices in railway stations should be exactly as they were in the outside bazaars. It was explained that it was not reasonable to expect that a vendor serving within a station where he had only a limited clientele and sales should charge the same price as for foodstuffs sold in a large shop in a bazaar with a constant flow of customers and with a large offtake.

Dealing with the question of monopoly, the Honourable Member for Railways undertook to convene another meeting of the Central Advisory Council for Railways and refer this question to them for advice as to the principles that should govern the allocation of areas to a single contractor. In view of this undertaking, the resolution was finally withdrawn.

(ii) A similar resolution was moved by the Honourable Mr. P. N. Sapru on the 14th March 1940 in the Council of State. This resolution read as follows :—

"That this Council recommends to the Governor General in Council to instruct the authorities of all railways to adhere to the following principles in giving contracts of foods, eatables and drinks :—

(*a*) the contract should be given, where possible, preferably to local contractors and in no case should any monopoly of contract be permitted;

(*b*) the railway administrations should not attempt to derive monetary profit from contractors;

(*c*) the articles should be sold at market rates;

(*d*) no contractor should be allowed to sublet in any case."

In view of the undertaking that the matter would be considered in the light of the conclusions reached by the Central Advisory Council at its next meeting, the resolution was withdrawn by the mover.

5. Railway Budget.—The railway budget for 1940-41 was discussed in detail with the Standing Finance Committee for Railways in their meetings held on the 30th and 31st January and 12th February 1940. It was presented to both Houses of the legislature on the 16th February 1940. The general discussion on the budget took place in the Legislative Assembly on the 22nd February, and in the Council of State on the 23rd February. The voting on the demands for grants in the Assembly occupied two days, *viz.*, 24th and 26th February.

During the general discussion, the mention of the prospect of manufacturing locomotives in India and the decision of Government to purchase the Hardwar-Dehra and the Bengal-Dooars Railways were received with a general note of welcome. The criticism on the budget was mostly directed towards the proposed increase in rates and fares. A large variety of other subjects also came under review, the more important being the financial policy and financial administration of railways, the moratorium on the payment of arrear contributions to general revenues, the depreciation and railway reserve funds, the policy connected with labour matters, the extension of provident fund concessions to low paid staff, the effect of the war on the cost of living of railway employees, the recruitment of Muslims on railways, the catering arrangements, the employment of members of the Anglo-Indian community in the railway service, the minimum wage fixed for Anglo-Indian employees, the Sind-Bombay railway project, the stores purchase policy and the provision of amenities for third class passengers.

Of the six motions for reductions made during the debates on the demands for grants, one token cut was carried, one withdrawn, three negatived, and

the discussion on the one pertaining to conditions of service on railways could not be concluded as the maximum limit of time for discussion had been reached on the last day allotted for the budget. The motion carried related to the vagaries of the Grand Trunk Express running between Madras and Delhi. The motion withdrawn was in respect of the control of capital expenditure. The motions negatived were in regard to increase of freights and fares, grievances of railway employees and Muslim grievances.

6. Standing Finance Committee for Railways.—During the year 1939-40, the committee held meetings on twelve occasions. They scrutinised as usual the proposals for expenditure to be incurred in the year 1940-41 both on capital and revenue account prior to their being placed before the Legislative Assembly. Among other things they approved of the appointment of a committee consisting of one mechanical engineering officer and one finance officer to examine in detail schemes for starting the construction of locomotives in the existing railway workshops in India and the proposal to purchase the Bengal-Dooars Railway.

7. Purchase of the Bengal Dooars and Hardwar-Dehra Railways.—The Bengal-Dooars Railway, a metre gauge line 160·66 miles in length was owned by the Bengal-Dooars Railway Company, who worked it under contracts with the Secretary of State. The Secretary of State had the option to purchase the line on the 31st December 1940 by giving the company 12 months previous notice. As the purchase was financially justified, the Government of India recommended to the Secretary of State that the option should be exercised. The Secretary of State accepted the recommendation and gave the required notice to the company in England.

The purchase of the Hardwar-Dehra Railway, mention of which was made in the last year's report, was effected on the 31st December 1939 at a cost of Rs. 43,35,000.

8. Raising of the new minor works limit.—On railways the expenditure on new works other than those of a minor nature is charged to capital. In order to avoid over capitalisation as far as possible it was approved in principle as far back as 1936 that the then existing limit for new minor works, *viz.*, Rs. 2,000 should be increased. This has now been raised to Rs. 10,000. For the present the increased limit has been made applicable to State-managed railways only from 1st April 1940 and it is estimated that this will reduce the debit to capital account of these railways by about Rs. 30 lakhs a year. The question of extending these orders in some form or other to the company-managed railways is under consideration but the problem in their case is complicated by the fact that the allocation of expenditure as between capital and revenue is determined by the provisions of their contracts.

9. Meetings with Agents and General Managers of Railways and Provincial Governments.—During the year under review the Railway Board held two meetings with the General Managers of the principal railways. The first meeting was held at New Delhi on the 27th October 1939 and the second on the 16th March 1940.

Several visits were paid by the members of the Railway Board to the headquarters of the various railway administrations and provincial governments. Copies of the tour programmes were sent in advance to the Press, Provincial Governments and important mercantile associations in order that an opportunity might be afforded them to express their views on matters of common interest and discuss problems affecting the railways and transportation generally.

10. Central Advisory Council for Railways.—Five meetings of the Central Advisory Council for Railways were held during 1939-40. The first meeting was held at New Delhi on 14th April 1939, the second at Simla on the 16th September, and the third, fourth and fifth at New Delhi

on the 13th, 15th and 18th March 1940. The following subjects were discussed at these meetings with the results shown against each :—

Subject.	*Result of discussion.*
Nomination of members of the Central Advisory Council for Railways to the Local Railway Advisory Committees.	Eighteen members of the Council were nominated to serve on the various Local Railway Advisory Committees.
Catering contracts on railways . .	The Council gave their views on the charges levied by railways on refreshment room contractors, and station vendors; revision of rates and method of revision; grant of contracts to professional caterers, and limit of periods of contracts; giving contracts to local professional men as an alternative to giving contracts by areas or sections; arrangements for inspection of food stuffs; policy in regard to contracts for aerated waters and ice; charging an economic rent for first and second class refreshment rooms. and Indian refreshment rooms; and extension of the system of departmental catering.
Importing a limited number of supervisory staff for the mechanical workshops of State-managed railways.	The Council emphasized that the objective should be to train Indians so that there would be no necessity for importing supervisory staff from abroad.
Local taxation of State-owned railways.	The Council agreed that if party leaders favoured reintroduction in the Assembly of legislation in regard to local taxation of State-owned railways the Government should go ahead with the bill.
Ticketless travel bill	The Council agreed that something should be done in the way of legislation, and that the bill should be re-examined in the light of the suggestions and criticisms that had been made.
Areas of catering contracts on railways	The Council considered that the matter of granting contracts and licenses whether for individual stations, groups of stations or areas, should rest with railway administrations acting in consultation with their Local Advisory Committees. They also considered that the selection of individual contractors should not be placed before the Local Advisory Committees but that the following general principles should ordinarily be followed :— (*a*) contractors and vending licensees who have rendered and are rendering satisfactory service should not be replaced; (*b*) further contracts for Indian catering should not be given to any firm which holds area contracts extending over two divisions on the same railway, or an equivalent area; and (*c*) where new contractors or vending licensees have to be selected a preference should be shown to those resident within the area to which the contract relates, and the choice should be limited to professional caterers.

11. Local Railway Advisory Committees.—There were ninety-two meetings held during the year. This number includes three meetings of the newly constituted Local Advisory Committee of the Darjeeling Himalayan Railway which held its first meeting on the 10th May 1939. An interesting feature of the South Indian Railway Committee is that, for the first time

in its history, a lady member was nominated to fill a seat. It is believed that this is the only instance where a lady member has sat on a local railway advisory committee since these committees were constituted in 1923.

Of the various subjects discussed at the meetings, mention may be made of the following which are of general interest :—

(*a*) facilities for passengers at stations—

(i) provision of waiting rooms;

(ii) provision of benches on platforms;

(iii) improvements in the lighting of stations;

(iv) improvements in the existing arrangements for the supply of drinking water to passengers;

(v) raising of platforms;

(*b*) improvements in passenger stock—

(i) provision of latches and bolts in intermediate and third class compartments for females;

(ii) improvements in third class compartments for females;

(iii) improvements in the lighting arrangements of carriages;

(*c*) reduction in fares—

(i) issue of return tickets;

(ii) issue of holiday concession tickets;

(*d*) general—

(i) timings of trains, stoppage of trains at stations and provision of additional halts;

(ii) improvement of the quality of food supplied;

(iii) cleaning of carriages;

(iv) prevention of begging by professional beggars on trains and railway platforms.

12. Railway Rates Advisory Committee.—Sir Zahid Suhrawardy continued as President and Rai Bahadur P. C. Bose as Railway Member and Secretary of the Committee.

During the year orders were passed by the Government on the following two cases which had been reported on by the Committee in the previous year :—

(i) A complaint from Messrs. D. Abraham & Sons, Shipping and Clearing Agents, Bombay, against the Bombay, Baroda and Central India, East Indian, Great Indian Peninsula and North Western railways alleging that the enhanced freight rate of Rs. 1-7-1 per maund for hides and skins in wagon loads from Delhi to Bombay, Karachi and Calcutta brought into force from 1st January 1938 is unreasonable.

(ii) A complaint from the Federation of Baroda State Mills and Industries alleging that the special reduced rates granted by the Bombay, Baroda and Central India Railway from Bombay to Ahmedabad in respect of (*a*) paper N. O. C. in bales or bundles, (*b*) iron and steel, Division B, (*c*) machinery, (*d*) starch, (*e*) cotton raw, full-pressed, (*f*) cotton raw, half-pressed and (*g*) millboard are unduly preferential in relation to those for the same commodities from Bombay to Baroda and/or Petlad.

In case (i) the applicant stated that the complaint really related only to dry skins for export. The committee came to the conclusion that the rate of Rs. 1-7-1 per maund for dry skins for export was unreasonable and recommended a rate of Rs. 1-1-4 per maund at owner's risk from Delhi to Bombay, Karachi and Calcutta with a minimum weight condition of 400 maunds attached thereto. In case (ii) the committee found that the rates complained of were not unduly preferential and recommended the rejection of the complaint. The recommendations in both the cases were accepted by the Government.

At the beginning of the year, the following cases were pending with the Committee :—

(*a*) A complaint from the Calcutta Flour Mills Association alleging that the rates charged by the Eastern Bengal Railway for wheat flour from Calcutta stations to stations on that railway and on other railways reached *viâ* that railway, with the conditions of carriage attached thereto are unreasonable *per se* and that the rates charged to their competitors with the conditions of carriage attached thereto are unduly preferential to the said competitors;

(*b*) A complaint from the Bengal Oil Mills Association, Calcutta, alleging that the special rates charged by the East Indian Railway for mustard oil (in bulk) from Cawnpore, Agra, Hathras, etc., to Howrah, constitute undue preference of the United Provinces oil mills, that the existing rates for mustard seed from Cawnpore and other centres in the United Provinces to Calcutta are unreasonable and that the disturbance of the relativity between the rates for mustard seed and mustard oil has made the former particularly unreasonable;

(*c*) A complaint from the Bhima Ice Factory and Flour Mills, Cuttack, alleging that the existing rates charged by the Bengal Nagpur Railway for wheat in full wagon loads from stations in the Central Provinces to Cuttack are not only unreasonable but also subject the applicant to undue prejudice and disadvantage *vis-à-vis* Raipur.

During the year the following cases were referred to the committee for investigation :—

(*d*) A complaint from the Carlsbad Mineral Water Manufacturing Co., Ltd., Calcutta, alleging that the Bengal Nagpur Railway by carrying free of charge over its system, (1) aerated waters manufactured by its own factory and consigned by itself or by or to its agents or contractors and intended for sale to passengers, travelling or intending to travel over its system, in its refreshment rooms, hotels and at its stations, to its servants, clubs, stores and institutes and to the general public and (2) the returned empty bottles, has unduly preferred itself and subjected the applicant to undue prejudice;

(*e*) A complaint from the Kalyanpur Lime and Cement Works, Ltd., alleging that the special rate of annas 11 per ton charged by the Dehri Rohtas Light Railway for limestone from Banjari to Dehri-on-Sone to the Stone Suppliers Ltd., for traffic to the Rohtas Industries, Ltd., is unduly preferential and subjects the applicant to undue prejudice, that the " A " schedule rates of Rs. 1-11-0 per ton for limestone and lime from Banjari to Dehri-on-Sone and *viâ* is unreasonable, and that the sliding scale of rates for the said commodities between the same places for lime companies other than the Stone Suppliers, Ltd., are illegal and/or unreasonable;

(*f*) A complaint from the Upper Doab Sugar Mills, Ltd., Shamli, alleging that the enhanced siding charge of annas six and pies eight per wagon levied by the Shahdara Saharanpur Railway on sugarcane traffic is unreasonable.

(*g*) A complaint from Messrs. Senairam Doongarmall against the Assam Bengal Railway complaining that the terminal charge levied on their outward goods traffic booked from their siding at Tinsukia and the haulage charge levied under certain circumstances are unreasonable.

In regard to (*a*), the committee found that the C/C schedule of rates for flour in force on the Eastern Bengal Railway was unreasonable for

distances 337 miles and over, as also the weight condition of C/300 attached to that schedule for flour booked from Calcutta, and recommended replacement of the C/C schedule by the following schedule with a weight condition of C/200 attached thereto :—

Distances of 1 to 275 miles . .	·30 pie per maund per mile.
Plus for distances over 275 miles .	·11 pie per maund per mile.

They also recommended modifications in the rates and weight conditions for traffic booked to certain stations.

The recommendations were accepted by the Government.

The committee's reports on cases (*b*), (*c*) and (*d*) were under the consideration of the Government and the remaining three cases were still under enquiry by the Committee at the close of the year.

13. Steps taken to improve earnings.—An endeavour is made in the following paragraphs to indicate broadly the steps taken by railways during the year, to improve their earnings :—

(A) Railways continued to make alterations in rates and fares with a view to increasing their revenues. Details of these changes are given in paragraph 58 under Chapter IV. Special mention may, however, be made of the following :—

(i) Third class "Zone Season Tickets" were issued over the Bombay, Baroda and Central India Railway during the periods 1st to 20th July 1939 and 11th to 31st January 1940. The earnings derived from these tickets during the two periods were :—

	Rs.
July 1939	5,06,236
January 1940	5,65,077

(ii) Circular tour tickets at reduced fares, covering total distances varying from 3,684 miles to 4,939 miles, over practically the whole of India, by different routes, were introduced by the Bengal Nagpur Railway with effect from April 1939.

(iii) Cheap return journey tickets available for one to two days, at $1\frac{1}{5}$th single journey fares, were introduced over certain competitive sections of the North Western Railway.

(iv) Cheap return journey tickets of different classes at $1\frac{2}{3}$ and $1\frac{1}{2}$ single journey fares according as the distances are less or more than 500 miles, were introduced over the Great Indian Peninsula Railway between certain selected stations.

(v) There was a bumper mango crop in Chittoor and North Arcot districts and special wagon rates by passenger trains were quoted from stations in the Madras, Pakala and Bezwada districts to stations in Central and Northern India. About 5 lakh maunds of mangoes were carried at these rates, yielding a total revenue of over Rs. 7 lakhs.

(vi) Reduced rates ranging down to $\frac{1}{8}$th parcels rates continued to be charged for fresh fruits and vegetables over certain competitive sections of the North Western Railway where it was considered that these rates were able to divert traffic from road. During the year such reduced rates were introduced over 270 sections of the North Western Railway, and were withdrawn from 39 sections as the results obtained on these sections were not satisfactory.

(vii) With effect from the 15th November 1939, rates varying from about 8 to 30 per cent. below the normal rates for cotton seeds in wagon loads were quoted from the principal cotton

seed booking stations on the Great Indian Peninsula Railway to the following stations:—

1. *Viâ* New Delhi for traffic to North Western Railway stations, Shahdara-Delhi-Saharanpur Light Railway stations, and Gurgaon, Farukhnagar, Rewari, Dalmiya-Dadri, Bhiwani, Hissar, Hansi, Narnaul and Kosli on the Bombay, Baroda and Central India Railway.
2. New Delhi, Bombay, Agra stations and Morena.
3. *Viâ* Amalner for traffic to Navsari.

(viii) As a result of the war conditions it has been possible for certain railways to make a small increase in the special rates quoted in competition with rival transport services. The following are a few examples of the enhancement made in the special rates by the principal railways:—

(a) *Bombay, Baroda and Central India Railway*—

	Approximate enhancement. Per cent.
Cotton (raw) full-pressed	10
Wheat	10
Rice	15
Certain other commodities such as iron and steel machinery, etc.	25

(b) *Jodhpur Railway.*—With effect from 1st January 1940 an enhancement of 10 per cent. was made by the Jodhpur Railway in the special rates for (i) cotton (raw) full-pressed, (ii) cotton seeds, and (iii) wheat, quoted from certain stations in Sind to certain stations on the Bombay, Baroda and Central India Railway in competition with the rail-cum-sea route *viâ* Karachi, as the sea freight had gone up due to war.

(ix) All the special rates for manganese ore and chrome ore were enhanced over the Madras and Southern Mahratta Railway by Re. 1 per ton, with effect from 1st January and 1st March 1940, respectively.

(x) With effect from 1st March 1940 the following "increased charges" were levied, on the total freights and fares:—

Traffic.	*Increased charge.*
(*a*) Passenger	One anna per rupee.
(*b*) Other coaching traffic	Two annas per rupee.
(*c*) Goods other than coal	Two annas per rupee.

The increased charges were not levied on:—

(*a*) single journey fares of Re. 1 and under and children's half fares of annas 8 and under,

(*b*) return journey fares provided the single fare is Re. 1 or less,

(*c*) season ticket fares of any class where corresponding single journey adult fare is Re. 1 or under,

(*d*) military traffic to which military traffic rules and rates apply, except traffic carried at concession rates scheduled in Appendix B of the Military Tariff,

(*e*) postal traffic,

(*f*) railway materials and stores,

(*g*) food grains,

(*h*) grass dry (includes, bankas grass, bhoosa, dhall stalks, fodder, hay, kirby, moonj, sirkee and straw) grass green and chari and forage and fodder charged at famine concession rates,

(*i*) manures,

(*j*) newspapers and news-print.

(xi) During the month of March 1940, the surcharge of $12\frac{1}{2}$ per cent. (subject to a maximum of Re. 1 per ton) levied on coal freights, was replaced by an " increase in freight " of 15 per cent. without any maximum limit.

(B) Measures taken by railways to counteract motor competition, are detailed in paragraph 62 under Chapter IV.

(C) A detailed account of the steps taken by railways to facilitate the movement of traffic is given in Chapter IV.

14. Steps taken to reduce expenses.

14.1. Transportation.—The outbreak of the war necessitated investigation into the question of reduction of train mileage, and the conservation of power to meet emergencies which might arise. Certain railways found it possible to curtail train services with a minimum of inconvenience to the public. Any such curtailment was generally accompanied by the provision of additional halts to mail and fast trains to meet with public requirements. For example, over the Assam Bengal Railway the passenger and mixed train mileage was curtailed to the extent of 20·9 per cent. with effect from the 1st October 1939. Additional stops were provided on mail and fast trains to meet public convenience and during the currency of the time table it was found necessary to increase the service on the Chandpur-Laksam and Akhaura-Brahmanbaria sections by one up and one down train on each section.

The Bengal and North-Western Railway reduced its passenger train services by 10 per cent.

The East Indian Railway confined the curtailment of its services to the abolition of unimportant suburban and branch line local trains which had been put on mainly to foster traffic. Arrangements were, however, made to reduce the inconvenience caused to the public by introducing a few new trains (nine new trains and a sentinel coach service were introduced), by extending the run of other trains, or by diverting them over new routes. These arrangements resulted in the curtailment of 1,712 passenger train miles per day.

Other railways, while unable to make substantial reduction, have effected some economy in the same direction.

14.2. Engineering.—The various measures of economy introduced on railways in previous years were continued during the year under review. The more important steps taken, in this connection are detailed below :—

The Assam Bengal Railway decided to extend with effect from July 1940, the gang-lengths from 3 to 4 miles on the Chittagong-Laksam section, as an experimental measure.

Trials were in progress on the East Indian Railway in regard to a proposal for the greasing of fishplates with a cheaper quality of grease every third year. This is expected to result in an economy in permanent-way maintenance.

The welding of points and crossings on the Bombay, Baroda and Central India Railway resulted in a saving of Rs. 25,803 for the year.

A number of upper class waiting rooms was closed at certain stations on the Great Indian Peninsula Railway where the number of upper class passengers was small.

On the North Western Railway the trial of maintenance of track by the " spot " renewal system of sleepers, to which a reference was made in the last year's report was continued.

That railway also adopted a standard beat of approximately four miles per gang throughout the system.

On the South Indian Railway selected scrap dog-spikes were reconditioned and used in place of first and second class ones.

14.3. Mechanical and electrical.—Efforts to obtain greater availability and increased utilisation of existing locomotives and rolling stock continued on all railways. Engine links were revised wherever practicable. On the Madras and Southern Mahratta Railway pooling was introduced with engines of Rajamundry and Bitragunta based on the latter shed. This enabled several engines to be released for other purposes. The North Western Railway also transferred engines to other railways and condemned or sold 11 locomotives, 54 coaching and 12 goods units without replacement, thus effecting a reduction of approximately Rs. 15·25 lakhs in the capital at charge. Furthermore an exchange of engines of different types with the Eastern Bengal Railway was made to the mutual advantage of both railways.

The policy on the Eastern Bengal Railway of giving intermediate repairs to engines in Lalmanirhat and thus extending the period between heavy shop repairs was continued with success and served to reduce the load on the workshops. In addition, arrangements were made for certain metre gauge locomotives of the Eastern Bengal Railway to be repaired in the Pahartali shops of the Assam Bengal Railway where spare capacity was available.

Investigations in the use of scrap and more efficient production in railway workshops continued on a large scale and were responsible for appreciable savings. Amongst the larger individual savings reported were those on the Bengal Nagpur Railway and the Assam Bengal Railway shops where electroplating and saw mill shops respectively were reorganised. In the South Indian Railway shops a scheme for heavy boiler reconditioning was completed and several boilers turned out that would have otherwise required replacement.

Owing to a lack of mela stock on the Assam Bengal Railway the administration prepared and stored five third class carriages due replacement and set aside 15 more for conversion in 1940-41.

The system of engine cleaning by contract which is already in force on the Eastern Bengal Railway was introduced on the Bombay Division of the Great Indian Peninsula Railway and is expected to produce an appreciable annual saving.

On the East Indian Railway the scheme of concentrating running repairs to goods stock at selected 'key' stations was extended to Lucknow, intensive examination and reconditioning being done at Dhanbad.

The economies of 'single control' having been proved on other railways it was introduced on the Great Indian Peninsula Railway at six junctions, *viz.*, Dadar, Kotah, Ujjain, Amalner, Agra Cantonment and Muttra; the Bombay, Baroda and Central India Railway being the working railway in the case of Dadar, Kotah and Ujjain.

14.4. Job analysis which involves a detailed scrutiny of a particular facet of railway operation with a view to increased efficiency and a reduction in working expenses was continued on all the State-managed railways during the year. On most of the Company-managed railways, no special organisation undertakes this work, but similar investigations were carried out by the departments concerned on some of those railways. The table below shows for the seven years ending 1939-40 the economies effected on each of the more important railways and the cost of the organisation conducting the investigations. The question of dispensing with special staff for such investigations was discussed by the Railway Board with General Managers of railways during the year, but no definite decision had been taken in the matter before its close.

Railway.	1933-34.		1934-35.		1935-36.		1936-37.		1937-38.				1938-39.				Savings effected since the introduction of Job analysis to the end of 1938-39 (Recurring only).	1939-40.			
	Cost of Job analysis organization.	Savings effected.	Cost of Job analysis organization.	Savings effected.	Cost of Job analysis organization.	Savings effected.	Cost of Job analysis organization.	Savings effected.	Cost of Job analysis organization.	SAVINGS EFFECTED Recurring.	SAVINGS EFFECTED Non-recurring.	SAVINGS EFFECTED Total.	Cost of Job analysis organization.	SAVINGS EFFECTED. Recurring.	SAVINGS EFFECTED. Non-recurring.	SAVINGS EFFECTED. Total.		Cost of Job analysis organization.	SAVINGS EFFECTED. Recurring.	SAVINGS EFFECTED. Non-recurring.	SAVINGS EFFECTED. Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
East Indian . .	77,691	7,01,128	92,884	18,14,544	1,13,541	5,82,459	93,009	5,60,700	1,07,773	2,07,512	6,88,256	8,95,768	1,10,553	1,75,595	4,03,988	5,79,583	21,61,589	**71,437**	**74,789**	**2,86,712**	**3,61,501**
Great Indian Peninsula.	56,680	4,15,000	64,000	2,04,246	53,574	2,04,859	19,554	9,69,224	17,673	2,29,137	6,745	2,35,882	23,807	44,160	..	44,160	29,75,733	**43,234**	**1,02,288**	..	**1,02,288**
North Western .	32,000	12,66,749	46,006	12,37,376	56,729	7,22,202	40,056	33,35,092	60,855	4,09,358	23,16,748	27,26,106	65,760	3,70,991	21,32,835	25,03,826	40,63,225	**64,522**	**4,07,147**	**1,52,377**	**5,59,524**
Eastern Bengal .	63,000	2,17,864	65,995	1,29,508	26,134	41,600	25,969	1,17,152	40,527	2,89,015	*Nil*	2,89,015	62,279	46,848	7,080	53,928	5,25,652	**40,611**	**1,09,307**	..	**1,09,307**
Bombay, Baroda and Central India.	58,789	3,52,862	35,300	11,41,596	3,643	2,25,682	247	8,27,666	4,516	3,04,663	1,526	3,06,189	1,177	4,77,972	..	4,77,972	26,44,314	***Nil***	**1,20,114**	**14,900**	**1,35,014**
Madras and Southern Mahratta.	8,750	45,220	17,632	1,14,000	4,920	2,56,000	120	1,94,852	10,766	33,137	51,959	85,096	13,645	51,195	40,036	91,231	6,79,539	**22,193**	**3,420**	**3,465**	**6,885**
South Indian .	19,580	27,400	2,180	25,000	221	8,463	504	7,585	6,530	7,799	9,812	17,611	10,446	18,694	4,341	23,035	67,569	***Nil***	**8,795**	**793**	**9,588**
Burma . . .	7,500	25,871	26,615	73,352	..	77,591	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Assam Bengal .	12,825	1,31,755	8,208	12,659	1,490	..	7,065	24,146	3,966	4,025	..	4,025	27,994	88,232	1,751	89,983	**1,92,899**	***Nil***	..	..	..
Bengal Nagpur .	..	..	..	..	17,575	13,68,493	2,617	66,330	9,475	20,634	12,680	33,314	..	56,235	672	56,907	7,83,070	..	**—2,069**	**2,806**	**737**

15. Closing of unremunerative branch lines.—The railways continued their scrutiny of the financial position of their branch lines with a view to ascertaining if any of them was being worked at a loss and could be closed with financial advantage. No branch was, however, closed during the year as a result of this examination, except the remaining Agra-Hat Shamsabad section of the Agra-Bah branch of the Great Indian Peninsula Railway, the working of which was discontinued with effect from 1st April 1939 in accordance with the decision taken last year.

16. Effect of the war on earnings and expenditure.—The curtailment of coastal steamer services and the increase in sea freights resulted in a diversion to the railway of much traffic which would normally have been carried by sea. The rise in the prices of petrol and other motor accessories reduced to some extent the effect of road competition. There was consequently a considerable increase in the movement of traffic by rail of raw cotton, raw jute, coal, wheat, timber and mineral ores. The increase in military traffic and the development of indigenous industries such as iron, steel, glass, jute, paper and chemicals, also contributed towards the upward trend in earnings. Overseas tourist traffic, however, ceased almost completely and the restrictions imposed by Government on exports to neutral and enemy countries and the dislocation of normal international trade had adverse effects on the earnings. The net result, however, was a substantial increase in the traffic carried. The receipts for the year were Rs. 97·65 crores against Rs. 94·48 crores for the last year, part of the increase (approximately Rs. 63 lakhs) being due to the enhancement in rates and fares which came into force from 1st March 1940.

There was increase in expenditure owing to the rise in prices of stores. This increase was, however, partly counteracted by economy campaigns on the railways and also by the fact that, in respect to revenue expenditure, certain works not affecting the standard of efficiency of operation were deferred.

CHAPTER II.

FINANCIAL RESULTS.

A.—*Trade Review.*

17. India's trade with other countries contributes to some extent to the revenues of the railways. The details of 'exports' and 'imports' of principal commodities during the year 1939-40 as compared with the previous two years are given in the two statements which follow:

17.1. Exports.—During the year 1939-40, the total value of exports including re-exports amounted to Rs. 213 crores as compared with Rs. 169 crores in the preceding year, an increase of Rs. 44 crores or 26 per cent. The following table shows the fluctuations in important commodities:—

—		Quantity (in thousands).					Value.				
		1937-38.	1938-39.	**1939-40.**	1939-40 compared with 1937-38.	1939-40 compared with 1938-39.	1937-38 (Crores).	1938-39 (Crores).	**1939-40 (Crores).**	1939-40 compared with 1937-38 (Lakhs).	**1939-40 compared with 1938-39 (Lakhs).**
							Rs.	Rs.	Rs.	Rs.	Rs.
Raw jute	Bales	4,185	3,866	**3,181**	—1,004	—685	14·72	13·40	**19·73**	+5,01	**+6,33**
Metals and ores	Tons	1,904	1,509	**1,545**	—359	+36	6·13	4·91	**6·45**	+32	**+1,54**
Pig iron	,,	629	514	**569**	—60	+55	2·60	2·56	**2·84**	+24	**+28**
Manganese ore	,,	1,001	456	**719**	—282	+263	2·21	1·07	**1·83**	—38	**+76**
Jute cloth	Yds.	1,643,082	1,549,727	**1,560,478**	—82,604	+10,751	15·37	13·34	**22·40**	+7,03	**+9,06**
Hides and skins	Tons	75	59	**67**	—8	+8	11·49	8·60	**11·06**	—43	**+2,46**
Indian raw wool	Lbs.	37,989	55,416	**53,208**	+15,219	—2,208	2·65	2·99	**3·23**	+58	**+24**
Jute bags	No.	612,260	598,436	**1,210,183**	+597,923	+611,747	13·17	12·46	**25·44**	+12,27	**+12,98**
Food grains	Tons	878	742	**408**	—470	—334	9·49	7·74	**5·07**	—4,42	**—2,67**
Wheat	,,	460	279	**8**	—452	—271	4·62	2·48	**0·10**	—4,52	**—2,38**
Barley	,,	35	9	..	—35	—9	0·29	0·08	**0·01**	—28	**—7**
Wheat flour	,,	62	61	**50**	—12	—11	0·89	0·78	**0·68**	—21	**—10**
Rice	,,	228	284	**267**	+39	—17	2·62	3·18	**3·22**	+60	**+4**
Paraffin wax	,,	12	9	**8**	—4	—1	0·51	0·36	**0·33**	—18	**—3**
Coffee	Cwts.	135	185	**168**	+33	—17	0·55	0·75	**0·73**	+18	**—2**
Cotton manufactures including twist and yarn.	..	..	..	..	..	..	9·29	7·12	**8·58**	—71	**+1,46**
Indian cotton piecegoods	Yds.	241,255	176,992	**221,405**	—19,850	+44,413	6·50	4·79	**6·11**	—39	**+1,32**
Cotton twist and yarn	Lbs.	40,124	37,960	**36,943**	—3,181	—1,017	2·03	1·88	**1·79**	—24	**—9**
Wood and Timber and manufactures thereof.	..	..	..	..	..	..	0·29	0·24	**0·21**	—8	**—3**
Raw rubber	Lbs.	17,755	17,218	**21,544**	+3,789	+4,326	0·84	0·72	**0·94**	+10	**+22**
Raw hemp	Cwts.	830	816	**741**	—89	—75	0·75	0·72	**0·86**	+11	**+14**
Tobacco	Lbs.	52,082	65,143	**61,972**	+9,890	—3,171	2·00	2·76	**2·53**	+53	**—23**
Coir manufactures	Cwts.	744	692	**861**	+117	+169	1·04	0·96	**1·28**	+24	**+32**
Lac (chiefly shellac)	,,	665	644	**755**	+90	+111	1·62	1·27	**1·89**	+27	**+62**
Raw cotton	Bales	2,731	2,703	**2,948**	+217	+245	29·03	23·86	**30·11**	+1,08	**+6,25**
Tea	Lbs.	334,225	348,050	**356,695**	+22,470	+8,645	24·39	23·29	**26·08**	+1,69	**+2,79**
Oilseeds	Tons	950	1,199	**849**	—101	—350	14·16	15·06	**11·84**	—2,32	**—3,22**
Linseed	,,	227	318	**219**	—8	—99	3·57	4·40	**3·18**	—39	**—1,22**
Groundnut	,,	619	835	**549**	—70	—286	8·93	9·93	**7·19**	—1,74	**—2,74**
Rape seed	,,	32	12	**22**	—10	+10	0·46	0·16	**0·33**	—13	**+17**
Castor seed	,,	42	8	**40**	—2	+32	0·64	0·10	**0·71**	+7	**+61**
Coal	,,	1,006	1,321	**1,990**	+984	+669	0·95	1·32	**1·89**	+94	**+57**
Woollen carpets and rugs	Lbs.	11,061	8,945	**8,273**	—2,788	—672	1·02	0·82	**0·74**	—28	**—8**
Fodder, bran and pollards	Tons	16	17	**10**	—6	—7	0·09	0·09	**0·05**	—4	**—4**
Animals	No.	230	179	**135**	—95	—44	0·09	0·08	**0·08**	—1	..

It will be noticed that when compared with 1938-39 there were increases under jute bags and cloth, tea, hides and skins, metals and ores and cotton piecegoods and decreases under oilseeds (linseed and groundnut) and food grains. Raw jute and raw wool decreased in quantity but increased in value.

17.2. Imports.—The total value of the imports of foreign merchandise into British India (excluding Burma) during 1939-40 amounted to Rs. 165 crores as compared with Rs. 152 crores in the preceding year, an increase of 13 crores or 8·6 per cent. The following table shows the fluctuations in important commodities :—

—		Quantity (in thousands).					Value.				
		1937-38.	1938-39.	1939-40.	1939-40 compared with 1937-38.	1939-40 compared with 1938-39.	1937-38 (Crores).	1938-39 (Crores).	1939-40 (Crores).	1939-40 compared with 1937-38 (Lakhs).	1939-40 compared with 1938-39 (Lakhs).
							Rs.	Rs.	Rs.	Rs.	Rs.
Raw cotton	Tons	134	96	**84**	—50	—12	12·13	8·51	**8·05**	—4,08	—46
Machinery and millwork	..	..	..	..	..	..	17·15	19·05	**14·67**	—2,48	—4,38
Jute machinery	..	..	..	..	..	..	1·06	0·71	**0·46**	—60	—25
Electrical machinery	..	..	..	..	..	..	2·69	3·72	**2·36**	—33	—1,36
Boilers	..	..	..	..	..	..	1·17	1·40	**0·85**	—32	—55
Metals and ores	Tons	438	344	**331**	—107	—13	13·39	10·87	**10·87**	—2,52	..
Iron and steel	"	369	272	**261**	—108	—11	8·21	6·68	**6·09**	—2,12	—59
Metals other than iron and steel and manufactures thereof.	"	69	72	**70**	+1	—2	5·18	4·19	**4·78**	—40	+59
Coal tar dyes	Lbs.	20,888	12,023	**12,833**	—8,055	+810	3·43	2·60	**2·87**	—56	+27
Electrical instruments	..	..	..	..	..	..	3·47	3·31	**2·87**	—60	—44
Paper and pasteboard	Cwts.	3,633	3,073	**2,701**	—932	—372	4·15	3·23	**3·46**	—69	+23
Provisions	..	..	..	..	..	..	2·60	2·48	**2·63**	+3	+15
Hardware	..	..	..	..	..	..	3·31	2·57	**2·27**	—1,04	—30
Chemicals	..	..	..	..	..	..	3·33	3·05	**4·52**	+1,19	+1,47
Wheat	Tons	22	159	**86**	+64	—73	0·24	1·17	**0·61**	+37	—56
Fruits and Vegetables—											
Dried, salted or preserved	"	93	82	**74**	—19	—8	1·10	0·88	**0·79**	—31	—9
Rubber manufactures	..	..	..	..	..	..	1·89	1·41	**1·48**	—41	+7
Textile group	..	..	..	..	..	..	27·29	21·24	**22·80**	—4,49	+1,56
Cotton piecegoods	Yds.	590,798	647,264	**579,001**	—11,797	—68,263	11·69	10·27	**9·65**	—2,04	—62
Cotton twist and yarn	Lbs.	21,998	36,459	**41,132**	+19,134	+4,673	2·51	2·93	**3·52**	+1,01	+59
Wool and woollen goods	..	..	..	..	..	..	4·15	2·82	**2·16**	—1,99	—66
Artificial silk	..	..	..	..	..	..	4·87	2·24	**4·59**	—28	+2,35
Silk piecegoods	Yds.	22,868	16,873	**9,121**	—13,747	—7,752	0·90	0·67	**0·54**	—36	—13
Rice (not in the husk)	Tons	1,198	1,282	**1,887**	+689	+605	10·98	11·37	**17·85**	+6,87	+6,48
Soap	Cwts.	42	34	**33**	—9	—1	0·24	0·22	**0·24**	..	+2
Sugar	Tons	14	36	**255**	+241	+219	0·19	0·46	**3·32**	+3,13	+2,86
Motor vehicles (cars and cycles).	No.	17	12	**11**	—6	—1	3·03	2·22	**2·10**	—93	—12
Motor omnibuses	"	15	8	**15**	..	+7	2·07	1·18	**2·05**	—2	+87
Mineral oils	Gals.	474,946	438,711	**462,950**	—11,996	+24,239	17·45	14·67	**17·13**	—32	+2,46
Kerosene oil	"	202,646	182,054	**193,466**	—9,180	+11,412	7·62	6·46	**7·51**	—11	+1,05
Fuel oil	"	128,048	136,788	**146,448**	+18,400	+9,660	1·83	1·98	**2·13**	+30	+15
Cotton hosiery	..	..	..	..	..	..	0·29	0·18	**0·12**	—17	—6
Haberdashery and millinery	..	..	..	..	..	..	0·64	0·47	**0·43**	—21	—4
Boots and shoes	Pairs	1,183	835	**561**	—622	—274	0·22	0·15	**0·10**	—12	—5
Precious stones and pearls unset.	..	..	..	..	..	..	1·24	1·15	**0·88**	—36	—27
Wood and timber	..	..	..	..	..	..	2·98	2·87	**2·70**	—28	—17

As compared with 1938-39 the principal items showing increases were rice not in the husk, sugar, mineral oils, artificial silk, chemicals and cotton twist and yarn while decreases were noticed under machinery and millwork, wool and woollen goods, cotton piecegoods, iron and steel, wheat and raw cotton.

B.—Financial results of State Railways.

18. Financial results of working.—The deterioration in traffic, which set in from the second half of 1937-38 and continued during the whole of the year 1938-39, was checked only in the latter part of the year under review. Since then the traffic earnings have been improving steadily and railways were able to earn 97·65 crores in 1939-40 against 94·48 crores in 1938-39, an increase of 3·17 crores. The increase was mostly in goods earnings and a part of it was due to the increase in rates and fares introduced from 1st March 1940.

18.1. Ordinary working expenses excluding depreciation amounted to 52·26 crores against 51·48 crores in the previous year or about $\frac{3}{4}$ crore more.

18.2. The amount set apart from revenue for depreciation was 12·59 crores, which is 3 lakhs more than that in 1938-39, owing to an increase in the capital at charge of railways in 1938-39. The working expenses including depreciation were 64·85 crores against 64·04 crores in 1938-39.

18.3. Miscellaneous transactions during 1939-40 resulted in a net receipt of 64 lakhs against 23 lakhs in 1938-39. The increase of 41 lakhs was chiefly due to the realisation of a larger amount of interest on depreciation fund balances than in the previous year owing to more accretion to the fund.

18.4. The net revenue amounted to 33·44 crores against 30·67 crores in 1938-39 and was in excess of interest charges by 433 lakhs as compared with 137 lakhs in 1938-39. The entire amount of surplus was paid to the general revenues as contribution for railways for 1939-40, against 463 lakhs due for that year, leaving a balance of 30 lakhs in arrears.

18.5. The appropriation to the depreciation fund was 12·59 crores and the amount withdrawn for renewals was 6·53 crores, resulting in a net addition of 6·06 crores to the fund. The actual balance at credit of the fund was 30·75 crores and the nominal balance was about 61·44 crores.

18.6. The total works expenditure during the year under review amounted to 11·01 crores of which 4·48 crores was charged to capital and the balance to the depreciation fund. The capital expenditure was 286 lakhs on open line works, 30 lakhs on new construction and 132 lakhs on the purchase of railways. There was an increase of 116 lakhs in the Stores balances which at the end of 1939-40 amounted to $11\frac{1}{4}$ crores.

18.7. At the end of 1939-40 the unliquidated liabilities of railways amounted to 66 crores. Of this 30·29 crores is the net amount of loans taken from the depreciation fund, and the balance represents the contributions to general revenues which has remained unpaid from 1931-32 to 1936-37 fully, and partly during the years 1937-38, 1938-39 and 1939-40. The details are as follows :—

(In crores of rupees.)

	Loans from depreciation fund.	Unpaid contributions to general revenues.
1931-32	4·25	5·36
1932-33	10·23	5·23
1933-34	7·96	5·21
1934-35	5·06	5·04
1935-36	4·00	4·99
1936-37	− 1·21	4·91
1937-38	...	1·58
1938-39	...	3·09*
1939-40	...	0·30
Total	30·29	35·71

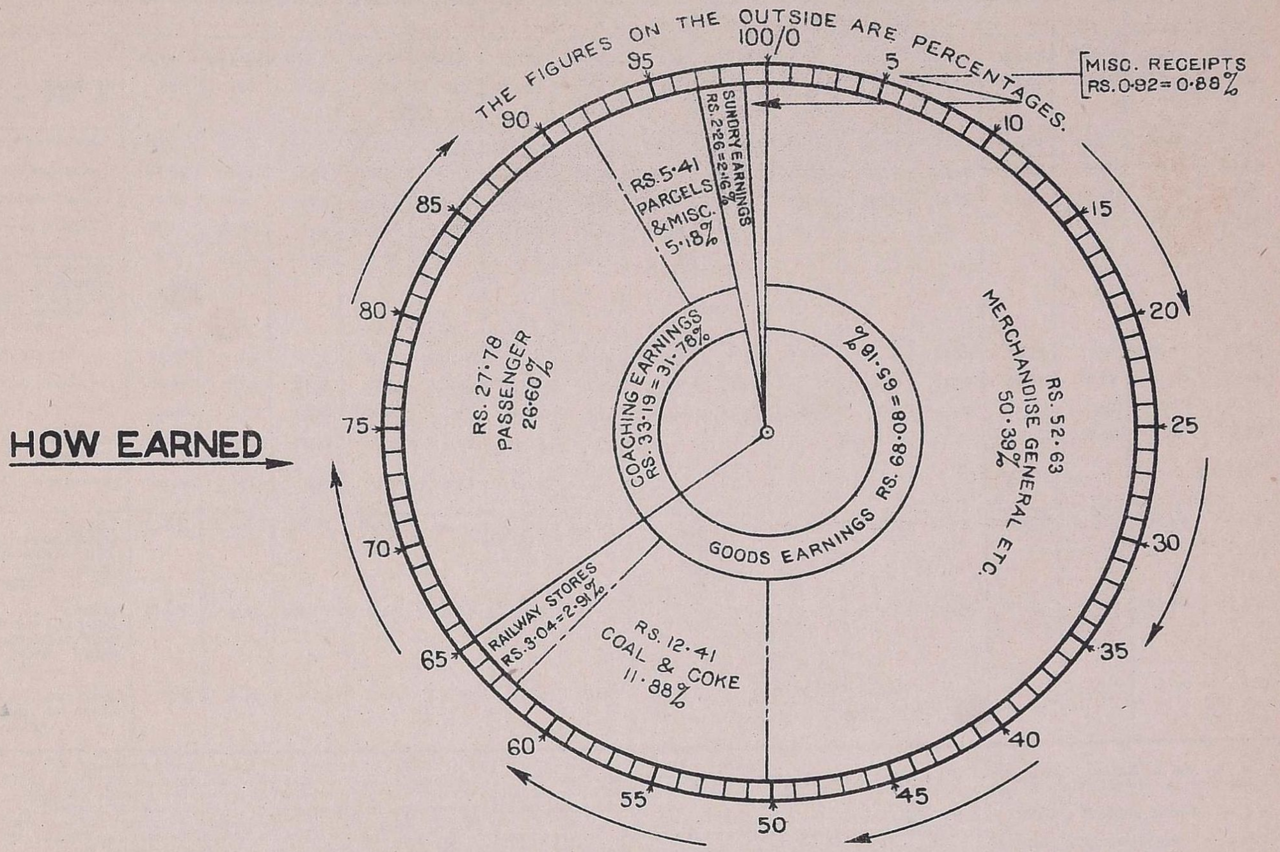
* Includes adjustment of 4 lakhs charged in excess against the strategic lines.

REVENUE RECEIPTS AND EXPENDITURE OF STATE-OWNED RAILWAYS IN INDIA INCLUDING WORKED LINES 1939-40

FIGURES IN CRORES.

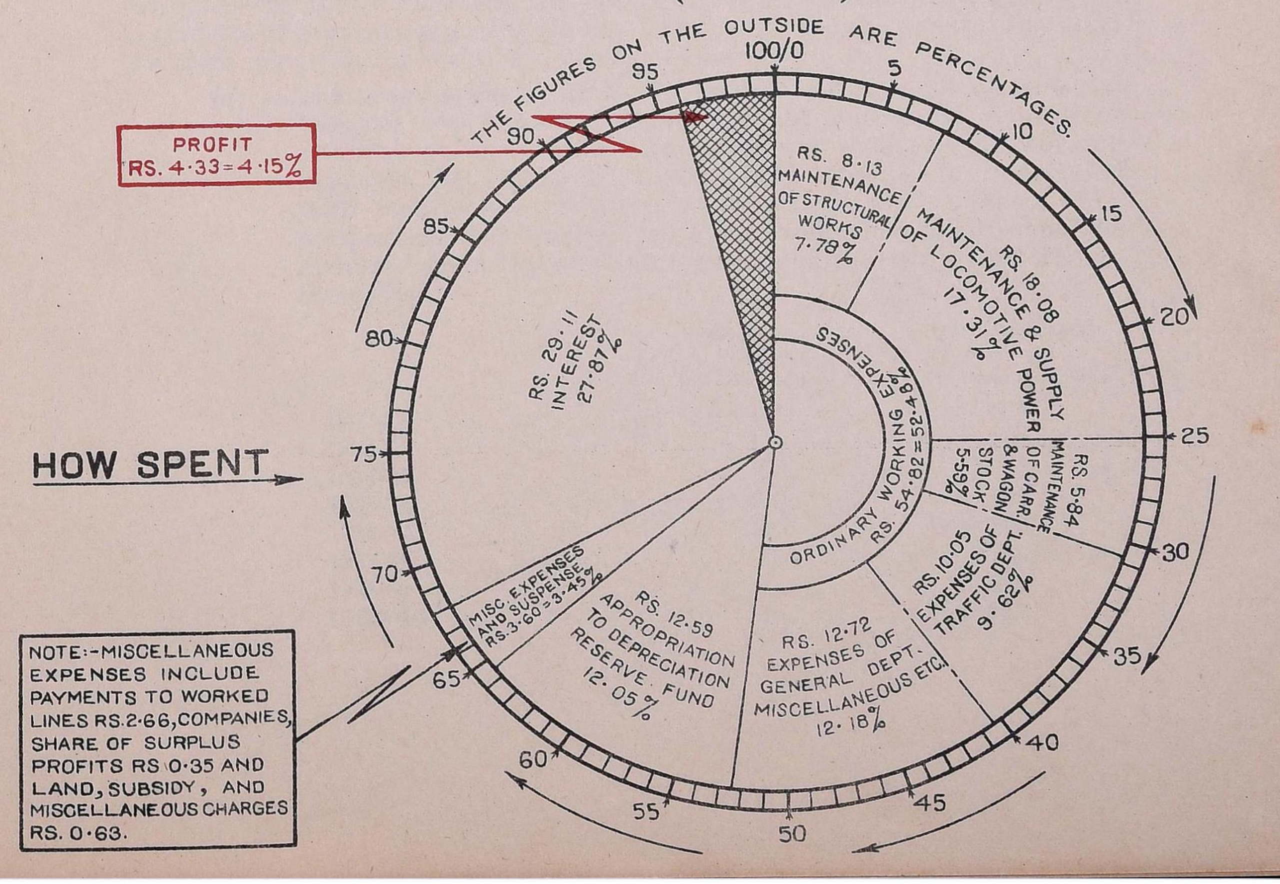
TOTAL REVENUE RECEIPTS.

(RS. 104·45)



TOTAL REVENUE EXPENDITURE.

(RS. 100·12)



19. The following statement gives the financial statistics of Indian State-owned railways from 1924-25 to 1939-40 :—

(Figures in lakhs of rupees.)

—	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	**1939-40.**
Mileage	*26,985*	*27,090*	*27,664*	*28,086*	*29,111*	*30,878*	*31,197*	*31,640*	*31,642*	*31,644*	*31,619*	*31,732*	*31,729*	*29,680**	*29,725*	**29,721†**
Capital at charge at end of year (in crores).	635	654	681	714	739	770	783	790	789	787	787	789	789	754	755	**759**
Gross traffic receipts	1,00,13	98,94	98,42	1,03,43	1,03,73	1,02,70	95,10	86,63	84,43	86,63	90,20	90,65	95,49	95,01	94,48	**97,65**
Operating expenses	51,65	52,99	52,89	53,06	54,22	55,59	54,39	49,31	49,08	49,50	50,27	50,87	50,23	50,37	51,48	**52,26**
Depreciation fund	10,35	10,67	10,89	11,38	12,00	12,59	13,07	13,46	13,77	13,56	13,72	13,25	13,15	12,57	12,56	**12,59**
Net Traffic receipts	38,13	35,28	34,64	38,99	37,51	34,52	27,64	23,86	21,58	23,57	26,21	26,53	32,11	32,07	30,44	**32,80**
Net Miscellaneous receipts after deducting miscellaneous charges and surplus profits payable to companies.	—1,07	—1,19	—1,27	—87	—37	—2	—11	1	1,10	1,05	53	86	—9	—5	23	**64**
Net revenue	37,06	34,09	33,37	38,12	37,14	34,50	27,53	23,87	22,68	24,62	26,74	27,39	32,02	32,02	30,67	**33,44**
Interest charges	23,90	24,81	25,87	27,27	29,33	30,46	32,72	33,07	32,91	32,58	31,80	31,39	30,81	29,26	29,30	**29,11**
Surplus	13,16	9,28	7,50	10,85	7,81	4,04	—5,19	—9,20	—10,23	—7,96	—5,06	—4,00	1,21	2,76	1,37	**4,33**
Paid as contribution to general revenues.	6,78	5,49	6,01	6,28	5,23	6,12	5,74	..	..	..	..	..	..	2,76	1,37	**4,33**
Transferred to railway reserve.	6,38	3,79	1,49	4,57	2,58	—2,08	—10,93	—4,95	..	..	..	..	..	..	..	..
Ratio of working expenses (excluding Depreciation fund) to Gross Traffic receipts.	51·6%	53·6%	53·7%	51·3%	52·3%	54·1%	57·2%	56·9%	56·7%	55·8%	54·7%	54·9%	51·4%	51·6%	53·1%	**52·0%**
Ratio of working expenses (including Depreciation fund) to Gross Traffic receipts.	61·9%	64·3%	64·8%	62·3%	63·8%	66·4%	70·9%	72·5%	73·0%	71·4%	69·9%	69·5%	65·2%	65·0%	66·4%	**64·9%**
Ratio of Net Traffic receipts to capital at charge.	6·0%	5·4%	5·1%	5·5%	5·1%	4·5%	3·5%	3·0%	2·7%	3·0%	3·3%	3·4%	4·2%	4·2%	4·2%	**4·5%**

NOTE 1.—The figures for the years from 1924-25 to 1936-37 are inclusive of those of the Burma Railways.

NOTE 2.—Credits for materials released from works not charged to revenue were taken in reduction of operating expenses up to 1931-32. From 1932-33 to 1935-36 they were added to receipts and have been included in the above table under net miscellaneous receipts. Since 1936-37, these credits have been taken in reduction of expenditure from the Depreciation Reserve fund. The amounts involved are detailed in paragraph 19.1 (*a*).

NOTE 3.—For purposes of proper comparison with past years the ratios in the last three lines of the statement with respect to 1932-33; 1933-34, 1934-35, 1935-36, 1936-37, 1937-38, 1938-39 and 1939-40 have been worked out as if the credits referred to in the preceding note were deducted from operating expenses.

NOTE 4.—Working expenses were reduced in 1930-31 by 166 lakhs by a credit from the Depreciation fund for correction of past accounting adjustments and in 1924-25 by 179 lakhs by certain abnormal refunds of expenditure in previous years.

*Excludes 51·80 miles of Bezwada Masulipatam Railway which was purchased by the State on the 4th February 1938.

†This does not include 19·12 miles of Alnavar-Dandeli Railway (Provincial) though taken under State-owned in mileage summary VII of Volume II for 1939-40. This also does not include 53·22 miles of Larkana-Jacobabad Railway and 32·04 miles of Hardwar-Dehra Railway which were purchased by the State on 3rd May 1939 and 1st January 1940 respectively.

19.1. Though these statistics show the trend of receipts and expenditure fairly clearly, they do not lend themselves directly to close comparison owing to changes of accounting during the period and certain other special features, the more important of which are mentioned below :—

(*a*) In the years prior to 1932-33, credits on account of material released from works whether in the nature of repairs or renewals or replacements were taken as reducing the working expenses but since that year only credits in connection with repairs and maintenance operations are so taken. For comparison with earlier years, the following sums should be deducted from the working expenses of the years 1932-33 and thereafter :—

	(*Including Burma Railways.*) (In lakhs of rupees.)	(*Excluding Burma Railways.*) (In lakhs of rupees.)
1932-33	119	103
1933-34	119	110
1934-35	90	84
1935-36	110	109
1936-37	115	110
1937-38	...	138
1938-39	...	132
1939-40	...	**147**

(*b*) In 1924-25, working expenses were reduced by a refund of customs duty paid in earlier years on stores imported for Company-managed railways amounting to 141 lakhs and by a transfer from reserves of 38 lakhs representing the cost of writing down stores. A sum of 179 lakhs should be added to the working expenses of that year.

(*c*) In 1930-31, working expenses were reduced by 166 lakhs by a credit from the depreciation fund for correction of past erroneous adjustments.

(*d*) The emergency deductions made from the pay of the staff reduced the working expenses in certain years, namely :—

	(*Including Burma Railways.*) (In lakhs of rupees.)	(*Excluding Burma Railways.*) (In lakhs of rupees.)
1931-32	44	41
1932-33	191	182
1933-34	114	110
1934-35	100	96
1935-36	8	8

(*e*) During the period 1936-37 to 1938-39, owing to a change in the allocation rules, certain renewal and replacement expenditure was transferred from ordinary working expenses to depreciation fund. The net figure in this respect was 73 lakhs in 1936-37, about 60 lakhs in 1937-38 and about the same amount in 1938-39.

20. Making allowance for these factors, the comparable figures of traffic receipts and working expenses (excluding Burma railways) from 1924-25 are as follows :—

(In crores of rupees.)

Year.	Traffic Receipts.	Ordinary working expenses including cut in pay.	Ordinary working expenses excluding cut in pay.
1924-25	95·84	51·26	51·26
1925-26	94·01	50·67	50·67
1926-27	93·81	50·49	50·49
1927-28	98·40	50·57	50·57
1928-29	98·78	51·46	51·46
1929-30	97·83	53·02	53·02
1930-31	90·82	53·75	53·75
1931-32	82·89	46·98	47·39
1932-33	81·10	45·85	47·67
1933-34	83·06	46·13	47·23
1934-35	86·48	47·13	48·09
1935-36	87·04	47·52	47·60
1936-37	91·79	47·79	47·79
1937-38	95·01	49·59	49·59
1938-39	94·48	50·76	50·76
1939-40	**97·65**	**50·79**	**50·79**

21. The statement below gives the net revenue and the percentage of interest charges on the capital at charge—

(In lakhs of rupees.)

Year.	Net revenue.	Percentage of net revenue to capital at charge.	Interest charges.	Percentage of interest charges to capital at charge.	Surplus or Deficit.
1924-25	35,71	5·9	22,98	3·8	12,73
1925-26	32,32	5·2	23,82	3·8	8,50
1926-27	32,02	4·9	24,83	3·8	7,19
1927-28	36,35	5·3	26,15	3·8	10,20
1928-29	35,84	5·1	28,10	4·0	7,74
1929-30	32,82	4·5	28,87	4·0	3,95
1930-31	26,02	3·5	31,13	4·2	—5,11
1931-32	22,93	3·0	31,46	4·2	—8,53
1932-33	21,86	2·9	31,40	4·2	—9,54
1933-34	23,69	3·1	31,03	4·1	—7,34
1934-35	25,70	3·4	30,30	4·0	—4,60
1935-36	26,51	3·5	29,92	4·0	—3,41
1936-37	30,84	4·1	29,39	3·9	1,45
1937-38	32,02	4·2	29,26	3·9	2,76
1938-39	30,67	4·1	29,30	3·9	1,37
1939-40	**33,44**	**4·4**	**29,11**	**3·8**	**4,33**

22. The operating ratio of State-owned railways, *i.e.*, the ratio of working expenses to gross traffic receipts was 52 per cent. (excluding depreciation) against 53 per cent. in 1938-39, and 65 per cent. (including depreciation) or one per cent. less than in the previous year. In the table below the ratios of earlier years (excluding Burma Railways) are given for purpose of comparison.

Year.	Percentage, excluding depreciation.	Percentage, including depreciation.
Average of 5 years, 1924-25 to 1928-29	52·5	63·5
1929-30	54	66
1930-31	57	71
1931-32	56	72
1932-33	57	74
1933-34	56	72
1934-35	55	70
1935-36	55	70
1936-37	52	66
1937-38	52	65
1938-39	53	66
1939-40	**52**	**65**

23. Traffic Receipts.—The following table compares the traffic receipts (excluding Burma Railways) in detail with the previous years :—

(Crores of rupees.)

—	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	**1939-40.**
Passenger earnings	33·81	34·34	30·49	27·98	28·01	26·78	27·05	27·17	26·86	28·41	28·01	**27·78**
Other coaching earnings	5·99	5·63	5·24	5·10	4·89	4·80	4·79	4·92	5·06	5·16	4·96	**5·41**
Goods earnings .	64·62	62·07	57·89	52·89	51·58	55·68	58·39	58·93	63·79	64·79	64·38	**68·08**
Sundry earnings .	2·01	2·10	1·88	1·74	1·56	1·52	1·56	1·76	2·03	1·95	2·15	**2·26**
Suspense . .	—0·24	0·30	0·41	0·35	0·03	—0·49	0·09	—0·24	—0·24	0·15	0·12	**—0·79**
TOTAL .	106·19	104·44	95·91	88·06	86·07	88·29	91·88	92·54	97·50	100·46	99·62	**102·74**
Less— *Refunds* . .	*0·14*	*0·14*	*0·10*	*0·10*	*0·11*	*0·10*	*0·12*	*0·13*	*0·18*	..	..	..
Earnings of worked lines.	*7·27*	*6·47*	*4·99*	*5·07*	*4·86*	*5·13*	*5·28*	*5·37*	*5·53*	*5·45*	*5·14*	**5·09**
NET .	98·78	97·83	90·82	82·89	81·10	83·06	86·48	87·04	91·79	95·01	94·48	**97·65**

Compared with the previous year there has been an increase under all the items, except passenger earnings, suspense and earnings of worked lines.

23.1. The statement below gives the details of passenger earnings on **all Class I Railways** (excluding Burma Railways) from 1929-30 onwards. Figures are not available separately for State-owned railways alone, but the figures for Class I Railways can be taken as sufficiently representative.

Passenger earnings for Class I Railways.

(In lakhs of rupees.)

Classes.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	**1939-40.**
First class . . .	97	88	78	74	72	73	74	77	78	76	**68**
Second class . . .	1,68	1,57	1,43	1,38	1,32	1,33	1,36	1,37	1,39	1,35	**1,32**
Intermediate class . .	1,56	1,39	1,21	1,13	1,10	1,10	1,10	1,13	1,21	1,22	**1,27**
Third class . . .	31,19	27,65	25,47	25,65	24,50	24,72	24,83	24,45	25,94	25,89	**25,73**
TOTAL .	35,40	31,49	28,89	28,90	27,64	27,88	28,03	27,72	29,32	29,22	**29,00**

23.2. Similarly the statement below gives details of the main commodities which have contributed to the goods earnings of all Class I Railways (excluding Burma Railways) and compares them with similar figures for the past few years.

(Figures in lakhs.)

—	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	**1939-40.**
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Cotton raw, pressed and unpressed.	4,50	3,99	2,41	2,75	3,56	3,40	3,74	4,62	2,88	2,89	**3,17**
2. Cotton manufactured .	2,36	2,28	2,30	2,37	2,34	2,40	2,48	2,46	2,60	2,59	**2,61**
3. Coal for the public .	6,66	6,11	5,91	5,88	6,48	7,04	6,87	6,93	8,24	7,88	**9,11**
4. Coal for foreign railways and home line construction.	2,77	2,63	2,15	2,24	2,28	2,49	2,45	2,58	2,98	2,86	**2,95**
5. Metallic ores . .	1,33	80	50	36	52	84	1,15	99	1,41	1,06	**1,51**
6. Rice	3,25	2,88	2,83	2,87	3,07	3,25	3,06	3,38	3,30	3,39	**3,60**
7. Wheat . . .	2,02	2,68	2,15	1,82	1,84	2,09	2,10	2,46	2,67	2,40	**2,54**
8. Gram, pulse, jowar, bajra and other grains.	3,43	3,34	3,49	3,01	2,83	3,27	2,97	3,38	3,47	3,31	**3,51**
9. Iron and steel wrought .	2,40	2,02	1,78	1,97	2,18	2,30	2,54	2,61	2,49	2,63	**2,89**
10. Kerosene oil . .	1,64	1,46	1,58	1,35	1,43	1,49	1,46	1,60	1,59	1,58	**1,59**
11. Jute	1,46	1,36	99	1,12	1,29	1,24	96	1,30	1,17	1,18	**1,22**
12. Oil seeds . . .	3,93	3,99	3,50	2,86	3,61	2,94	2,74	3,28	3,03	3,60	**3,34**
13. Sugar . . .	2,01	2,02	1,50	1,28	1,66	1,55	1,55	2,27	2,11	2,16	**1,33**
14. Gur, jagree and molasses	92	95	1,23	1,36	1,18	1,17	1,25	1,27	1,20	1,01	**1,07**

All the commodities showed increase in earnings except sugar and oil-seeds which were responsible for decreases of 83 lakhs and 26 lakhs respectively. The most noticeable increases in 1939-40 were in coal traffic (132 lakhs) metallic ores (45 lakhs), cotton (30 lakhs), iron and steel wrought (26 lakhs), rice (21 lakhs), gram and pulses, jowar, bajra and other grains (20 lakhs), wheat (14 lakhs), kerosene oil, jute, gur, jagree and molasses contributed 11 lakhs to the increase in earnings.

23.3. The statement below compares the receipts of individual State-owned railways in 1939-40 with the previous years :—

(Figures in lakhs.)

Railways.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	**1939-40.**
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Assam Bengal . . .	2,05	1,96	1,84	1,56	1,60	1,80	1,60	1,68	1,76	1,90	**2,00**
Bengal Nagpur . . .	9,31	8,17	7,24	6,91	7,39	7,95	8,64	8,39	9,51	9,47	**10,80**
Bombay, Baroda and Central India.	11,52	10,90	10,30	10,17	10,61	11,07	11,08	11,89	12,01	11,87	**12,11**
Eastern Bengal . .	6,73	5,86	5,05	4,91	5,07	5,43	5,25	5,74	5,83	5,94	**6,19**
East Indian . . .	19,85	18,24	17,36	17,27	17,63	18,71	18,63	19,44	21,00	20,84	**21,29**
Great Indian Peninsula .	14,58	13,33	11,92	11,95	12,21	12,17	12,41	13,27	13,01	12,94	**13,55**
Madras and Southern Mahratta.	8,98	7,98	7,15	6,66	6,84	6,72	6,54	6,68	6,92	7,26	**7,60**
North Western (Commercial)	14,39	14,98	13,34	12,73	13,23	13,87	14,16	15,62	15,52	15,08	**14,96**
North Western (Strategic) .	1,59	1,48	1,32	1,23	1,23	1,23	1,26	1,38	1,45	1,31	**1,39**
South Indian . . .	6,33	5,80	5,30	5,51	5,14	5,24	4,99	5,12	5,34	5,24	**5,20**
Other Railways . .	2,50	2,12	2,07	2,20	2,11	2,29	2,48	2,58	2,66	2,63	**2,56**
TOTAL .	97,83	90,82	82,89	81,10	83,06	86,48	87,04	91,79	95,01	94,48	**97,65**

During the year under review there was an increase in the traffic receipts on all railways except the North Western (Commercial), South Indian and 'other railways'. The decreases on the latter railways were 12 lakhs, 4 lakhs and 7 lakhs, respectively. The decrease on the North Western Railway was due to reduced traffic in wheat, sugar, petrol, gram, pulses, oil-seeds and cotton. On the South Indian Railway, the decrease was mainly due to certain adjustments under 'suspense'. The increase in traffic receipts principally occurred on the Bengal Nagpur, Great Indian Peninsula, East Indian, Madras and Southern Mahratta, Eastern Bengal and Bombay, Baroda and Central India Railways. The largest increase of $1\frac{1}{3}$ crores was on the Bengal Nagpur Railway, contributed mostly by goods traffic and the withdrawal of rebate to the iron industries. The next largest increase of about $\frac{2}{3}$ crore was on the Great Indian Peninsula Railway, due to improvement under both passenger and goods traffic, the latter being specially noticeable in respect of coal and coke, cotton raw, iron and steel, metallic ores, salt, wood unwrought, kerosene oil and petrol. The increase of about $\frac{1}{2}$ crore on the East Indian Railway occurred exclusively in goods earnings. On the Madras and Southern Mahratta Railway, the passenger traffic and increased movements of jowar, bajra, cotton, oil-seeds and fruits accounted for an increase of $\frac{1}{3}$ crore. On the Eastern Bengal Railway, the increase of $\frac{1}{4}$ crore was partly in passenger earnings, due to larger sale of return and other concession tickets, and partly in goods earnings, mostly attributable to increased traffic in sugarcane, rice, cotton, jute and oil-seeds. The increase on the Bombay, Baroda and Central India Railway was also about $\frac{1}{4}$ crore, mainly due to increase in goods traffic under fuel, rice, grains, salt, gur, molasses, metallic ores, fodder, fruits and vegetables. On the Assam Bengal Railway the increase of 10 lakhs was mostly on account of increased jetty

receipts as a result of abnormal imports of Burma rice. The increase on the North Western Railway (Strategic) was chiefly on account of larger movement of troops.

24. Ordinary working expenses.—A comparison of working expenses (excluding depreciation) of all railways (other than Burma Railways) by abstracts is given below:—

(In lakhs of rupees.)

Abstracts.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	**1939-40.**
Maintenance of Structural Works.	8,24	8,45	8,43	7,86	7,94	7,72	**8,13**
Maintenance and supply of Locomotive Power.	16,16	16,39	16,09	16,24	17,53	17,92	**18,08**
Maintenance of Carriage and Wagon stock.	5,62	5,90	6,13	5,73	6,13	5,80	**5,84**
Maintenance of ferry steamers and harbours.	28	30	27	27	29	28	**29**
Expenses of Traffic Department.	10,34	10,48	10,42	10,59	10,63	10,02	**10,05**
Expenses of General Department.	4,66	4,70	4,69	4,67	4,89	3,99	**4,11**
Miscellaneous Expenses .	4,32	4,21	4,21	4,18	4,33	4,35	**4,51**
Electric Service Department .	1,20	1,22	1,18	1,16	1,20	3,83	**3,81**
Suspense	—2	—6	—5	12	7	10	**—4**
Emergency deductions from pay.	—1,10	—96	—8	..	..	..	..
TOTAL .	49,70	50,63	51,29	50,82	53,01	54,01	**54,78**
Deduct—Recoveries from worked lines.	2,60	2,66	2,68	2,66	2,64	2,53	**2,52**
Net total for State-owned railways.	47,10	47,97	48,61	48,16	50,37	51,48	**52,26**

24.1. A comparison of the working expenses (excluding depreciation) of each railway with the previous years will be found below:—

(Figures in lakhs.)

—	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	**1939-40.**
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Assam Bengal . . .	1,13	1,12	1,09	1,02	1,07	1,16	1,12	1,06	1,11	1,12	**1,10**
Bengal Nagpur . .	5,51	5,36	4,83	4,77	4,82	5,06	5,42	5,30	5,43	5,56	**5,92**
Bombay, Baroda and Central India.	6,07	6,14	5,47	5,38	5,26	5,44	5,33	5,55	5,62	5,75	**5,69**
Eastern Bengal . . .	3,84	3,74	3,29	3,16	3,33	3,41	3,62	3,64	3,73	3,96	**4,52**
East Indian . . .	10,21	9,95	9,02	8,88	8,78	9,19	9,24	9,23	10,06	10,32	**10,27**
Great Indian Peninsula .	8,37	8,57	7,13	7,06	6,99	6,78	6,76	6,55	6,64	6,78	**6,76**
Madras and Southern Mahratta.	3,95	3,88	3,33	3,24	3,30	3,40	3,41	3,26	3,51	3,72	**3.71**
North Western (Commercial)	8,47	9,03	7,74	7,24	7,57	7,61	7,50	7,51	7,85	7,90	**7,67**
North Western (Strategic) .	1,68	1,76	1,38	1,42	1,39	1,43	1,42	1,31	1,25	1,25	**1,26**
South Indian . . .	2,79	2,87	2,63	2,76	2,67	2,73	2,74	2,67	2,75	2,79	**2,82**
Other Railways .	1,00	1,02	98	92	95	1,06	1,12	1,13	1,16	1,15	**1,16**
TOTAL .	53,02	53,44	46,89	45,85	46,13	47,27	47,68	47,21	49,11	50,30	**50,88**

NOTE.—For comparison with earlier years, the figures from 1932-33 have been reduced by the amount of credits from released material. The amounts of rebate paid to branch lines and rental paid to South Bihar Railway have been included in the figures of various years from 1934-35.

The working expenses incurred during 1939-40 were 52·26 crores against 51·48 crores in 1938-39 or 78 lakhs more. The increase was chiefly due to the repayment to the depreciation reserve fund of the balance of revenue expenditure met from that fund on Hardinge Bridge protection works and earthquake damages, increase in the cost of coal and freight thereon and reconditioning of coaches and wagons.

25. Losses and gains.—The statement below gives the net gain or loss of the various railways for every year from 1924-25 to 1939-40. For the purpose of calculating these gains or losses, the figures shown in the Companies' accounts have been recast to accord with the Government accounting procedure, *i.e.*, the working expenses include the appropriation to the depreciation fund and not the actual expenditure on renewals and replacements which are taken into account in the Companies' own accounts.

(In lakhs of rupees.)

—	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.	TOTAL.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
State-managed railways.																	
Eastern Bengal . . .	16	10	70	80	54	16	—80	—1,23	—1,28	—1,25	—93	—1,18	—79	—78	—94	—1,21	—7,93
East Indian . . .	2,89	2,80	2,67	3,19	2,44	1,61	—18	—24	—13	37	1,14	1,04	1,75	2,39	2,00	2,34	26,08
Great Indian Peninsula . .	2,42	47	71	1,41	1,08	8	—1,72	—1,78	—1,68	—1,24	—1,04	—67	46	12	—6	62	—82
North Western (Commercial) .	2,87	1,76	1,21	1,23	9	—64	—1,16	—1,58	—1,78	—1,36	—70	25	1,53	1,07	64	77	4,20
North Western (Strategic) .	—1,59	—1,47	—1,65	—1,68	—1,74	—1,90	—2,18	—1,99	—2,09	—2,03	—2,03	—2,10	—1,96	—1,85	—1,92	—1,81	—29,99
Company-managed railways.																	
Assam Bengal . . .	—31	—13	—11	4	—6	—24	—39	—52	—74	—73	—60	—84	—75	—75	—66	—54	—7,33
Bengal Nagpur . . .	—12	—47	—40	—20	—47	—66	—1,99	—2,48	—2,80	—2,27	—1,86	—1,38	—1,52	—56	—83	19	—17,82
Bombay, Baroda and Central India.	2,92	2,20	1,42	1,58	1,64	1,25	43	45	41	99	1,28	1,56	2,16	2,16	1,92	2,18	24,55
Madras and Southern Mahratta	1,11	85	63	1,04	1,38	89	1	14	—27	—4	—26	—38	—3	—11	6	55	5,57
South Indian . . .	97	1,13	1,20	1,25	81	1,19	31	1	6	—21	—10	—32	—11	..	—14	—20	5,85
Lucknow-Bareilly . . .	9	9	4	10	6	5	6	4	5	5	8	8	10	10	8	10	1,17
Tirhoot	62	60	68	56	66	68	24	29	34	25	32	35	41	44	38	31	7,13

The railways which show a loss during 1939-40 are Assam Bengal ($\frac{1}{2}$ crore), the Eastern Bengal Railway (about $1\frac{1}{4}$ crores), the North Western—Strategic section—($1\frac{3}{4}$ crores) and the South Indian Railway (20 lakhs).

It is interesting to notice that during the 16 years, of which the first six were prosperous, the State has received large profits from seven railways, *viz.*, 26 crores from the East Indian, $24\frac{1}{2}$ crores from the Bombay, Baroda and Central India, about 6 crores from the South Indian; 7 crores from the Bengal and North-Western (Tirhoot); $5\frac{1}{2}$ crores from the Madras and Southern Mahratta; about $4\frac{1}{4}$ crores from the North Western (Commercial lines) and 1 crore from the Lucknow-Bareilly. On the other hand, it had to bear losses on five railways. The largest was about 30 crores on the Strategic section of the North Western Railway, the next largest being 18 crores on the Bengal Nagpur Railway. On the Assam Bengal Railway it amounted to $7\frac{1}{3}$ crores. The Eastern Bengal and Great Indian Peninsula Railways were responsible for losses of 8 crores and 82 lakhs respectively.

26. Capital at charge.—The statement below shows the capital at charge on all railways (excluding Burma Railways) in which the State has financial interest. For purposes of comparison sterling liabilities included

in the capital at charge have been converted into rupees at the statutory rate of exchange :—

Year	(Crores of rupees.) Capital at charge at the end of the year.	Year	(Crores of rupees.) Capital at charge at the end of the year.
1923-24	595	1931-32	754
1924-25	608	1932-33	754
1925-26	626	1933-34	752
1926-27	652	1934-35	752
1927-28	683	1935-36	754
1928-29	706	1936-37	754
1929-30	735	1937-38	754
1930-31	748	1938-39	755
		1939-40	759

It will be noticed that the capital at charge at end of 1939-40 is 4 crores more than at end of 1938-39 and has increased in 16 years by 164 crores, though the increase has not been uniform. During the first six prosperous years, the average yearly increase was $23\frac{1}{3}$ crores. During the next ten years, it is $2\frac{2}{5}$ crores.

Though the total increase in the capital at charge is 164 crores, the real expenditure on works during these 16 years is 174 crores since stores balances which form a part of the Capital at charge have been reduced by 10 crores in the period. Of this total, the construction of new lines accounts for 44 crores. $13\frac{1}{4}$ crores is due to the acquisition of lines already in existence, but owned by private companies, the most important of which are the Delhi-Ambala-Kalka, Amritsar-Patti-Kasur, the Southern Punjab, South Behar and Larkana-Jacobabad Railways. The balance of $116\frac{3}{4}$ crores represents the expenditure charged to capital on additions to and improvements of the open line such as rebuilding of bridges, relaying of track, improvement of traffic facilities, *e.g.*, expansion of station yards, purchasing of improved rolling stock, reconstruction and modernising of workshops and so on. At the same time 132 crores have been spent from the depreciation fund during the period for the improvement of the open line.

27. Works Expenditure.—The statement below gives the total expenditure of State-owned railways (excluding Burma Railways) on works and purchase of stores year by year from 1924-25 and shows separately the expenditure on new constructions, open line works and amounts spent on the purchase of railways.

(In lakhs of rupees.)

Years.	New constructions.	Open line works.	Purchase of railways and branch line shares.	Total capital.	Depreciation fund.	Total works expenditure.
1924-25	2,61	9,71	..	12,32	6,96	19,28
1925-26	3,87	14,62	..	18,49	7,56	26,05
1926-27	6,21	15,48	4,33	26,02	7,64	33,66
1927-28	9,36	21,18	3	30,57	10,58	41,15
1928-29	8,39	15,25	30	23,94	9,35	33,29
1929-30	5,81	15,32	7,06	28,19	11,26	39,45
1930-31	4,12	8,52	1	12,65	10,69*	23,34*
1931-32	2,53	3,66	..	6,19	8,01	14,20
1932-33	37	—45	..	—8	5,88	5,80
1933-34	13	—2,34	..	—2,21	7,80	5,59
1934-35	17	45	—20	42	8,30	8,72
1935-36	28	1,97	44	2,69	8,89	11,58
1936-37	..	50	..	50	7,45	7,95
1937-38	—5	61	—4	52	7,99	8,51
1938-39	6	2,27	..	2,33	7,09	9,42
1939-40	**30**	**2,86**	**1,32**	**4,48**	**6,53**	**11,01**
TOTAL	44,16	109,61	13,25	167,02	131,98	299,00

* Includes a debit of 166 lakhs for correction of past erroneous adjustments.

The total expenditure on works, excluding the credits of $1\frac{1}{2}$ crores for the value of materials released from works, was about $12\frac{1}{2}$ crores and was more by $1\frac{3}{4}$ crores than the expenditure in the previous year. Of the total, $3\frac{1}{4}$ crores was on rolling stock, 5 crores on renewal of track, and $4\frac{1}{4}$ crores on general engineering works, etc.

28. Stores balances.—The total stores balance at the end of 1939-40 was 116 lakhs higher than in the previous year :—

The table below gives the figures for a number of years :—

(Figures in lakhs.)

—	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Assam Bengal	25	32	18	12	9	13	13	15	18	22	21	15	14	13	14	17	18	27	38
Bengal Nagpur	1,40	1,62	1,48	1,50	1,28	1,17	1,08	1,33	1,36	1,21	1,07	1,02	97	1,01	1,06	1,11	1,02	1,17	1,31
Bombay, Baroda and Central India	2,77	2,72	2,33	1,77	1,63	1,46	1,67	1,62	1,61	1,65	1,46	1,30	1,09	1,02	93	87	80	87	90
Eastern Bengal	2,52	1,76	1,58	1,22	1,12	84	84	80	77	76	69	55	40	43	57	50	57	65	73
East Indian (including Oudh and Rohilkhand).	3,92	4,39	4,11	3,14	2,81	2,48	2,99	3,15	3,04	2,48	2,27	2,09	1,60	1,38	1,44	1,30	1,41	1,52	1,86
Great Indian Peninsula	4,66	3,88	3,98	2,90	2,39	2,23	2,53	2,42	2,62	2,52	2,18	1,80	1,51	1,27	1,17	1,03	98	1,03	1,25
Madras and Southern Mahratta	1,51	1,66	1,51	1,03	84	77	94	83	83	79	76	72	53	50	50	51	56	55	51
North Western (Commercial)	3,94	3,93	3,80	2,73	2,44	2,86	3,92	3,70	3,48	2,60	2,27	1,85	1,66	1,46	1,52	1,79	2,08	2,33	2,68
North Western (Strategic)	58	58	72	63	83	84	92	90	92	94	91	1,02	93	82	75	67	66	62	37
South Indian	1,14	1,39	99	77	1,13	1,07	1,24	1,14	1,06	94	80	70	56	47	48	49	51	59	69
Other Railways	31	41	42	43	37	39	47	44	53	57	52	47	43	43	44	43	47	48	56
TOTAL	23,00	22,66	21,10	16,24	14,93	14,24	16,73	16,48	16,40	14,68	13,14	11,67	9,82	8,92	9,00	8,87	9,24	10,08	11,24

29. Depreciation Fund.—The amount appropriated to the depreciation fund by debit to the working expenses of State-owned railways and the amount drawn from the fund to meet the expenditure incurred on the replacements and renewals actually carried out on those railways during 1939-40 are given in the statement below :—

Account of depreciation fund for 1939-40.

(Figures in lakhs.)

Railways.	Opening Balance.	Credits to Depreciation fund in 1939-40.	Amount spent on Replacements and Renewals, etc., and charged to Depreciation fund in 1939-40.	Closing Balance.
1	2	3	4	5
State Lines managed by State.	Rs.	Rs.	Rs.	Rs.
North-Western	12,47	2,46	1,64	13,29
Eastern Bengal	2,81	86	24	3,43
East Indian (including Tatanagar workshops).	9,93	2,47	1,26	11,14
Great Indian Peninsula	8,82	1,91	60	10,13
State Lines managed by Companies.				
Bengal Nagpur	6,76	1,30	99	7,07
Bombay, Baroda and Central India	5,43	1,24	52	6,15
Madras and Southern Mahratta	3,05	89	49	3,45
South Indian	2,57	77	28	3,06
Other Railways and Miscellaneous	3,54	69	51	3,72
TOTAL	55,38	12,59	6,53	61,44
Withdrawal from Depreciation fund to meet the loss on the working of railways.	—30,29	..	..	—30,29
Shares of branch lines, etc.	—33	..	—2	—31
Loans to Branch Line Companies	—9	..	..	—9
Net	24,67	12,59	6,51	30,75

30. An analysis of the financial results of the working of the railways owned by the State is given in the following statement, for the last two years, by each railway :—

(Figures in thousands of rupees.)

Railways.	Year.	Capital at charge.	*Deduct* amount of capital contributed by Companies and Indian States.	Net Government Capital at charge.	Receipts.	Working Expenses including Depreciation.	Payment to worked lines.	Net Receipts.	Percentage of Net Receipts on Capital at charge.	Charge against net Revenue Receipts. Payment on account of share of Surplus Profits.	Charge against net Revenue Receipts. Interest, Annuity and Sinking Fund charges.	Gain.	Loss.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
State Lines managed by State.													
North Western	1938-39	1,47,59,08	..	1,47,59,08	16,97,90	12,21,46	29,41	4,47,03	3·0	..	5,75,37	..	1,28,34
	1939-40	**1,48,44,96**	..	**1,48,44,96**	**16,92,39**	**11,96,47**	**27,85**	**4,68,07**	**3·2**	..	**5,72,26**	..	**1,04,19**
Eastern Bengal	1938-39	51,71,15	..	51,71,15	6,07,71	5,00,79	8,61	98,31	1·9	..	1,92,80	..	94,49
	1939-40	**51,76,42**	..	**51,76,42**	**6,33,60**	**5,54,53**	**7,75**	**71,32**	**1·4**	..	**1,92,04**	..	**1,20,72**
East Indian	1938-39	1,48,41,38	1,12,14	1,47,29,24	20,91,15	12,97,80	7,62	7,85,73	5·3	..	5,85,72	2,00,01	..
	1939-40	**1,49,58,04**	..	**1,49,58,04**	**21,33,33**	**13,09,56**	**3,37**	**8,20,40**	**5·5**	..	**5,86,84**	**2,33,56**	..
Great Indian Peninsula	1938-39	1,14,21,85	..	1,14,21,85	13,51,33	9,12,76	30,32	4,08,25	3·6	..	4,14,61	..	6,36
	1939-40	**1,14,21,13**	..	**1,14,21,13**	**14,17,82**	**9,10,35**	**35,42**	**4,72,05**	**4·1**	..	**4,10,14**	**61,91**	..
State Lines managed by Companies.													
Bengal Nagpur	1938-39	77,64,58	6,82,29	70,82,29	9,49,80	7,04,73	1,31	2,43,76	3·1	4,01	3,22,44	..	82,69
	1939-40	**77,96,23**	**6,82,29**	**71,13,94**	**10,82,10**	**7,41,03**	**1,14**	**3,39,93**	**4·4**	**17**	**3,20,19**	**19,57**	..
Bombay, Baroda and Central India	1938-39	74,07,95	5,49,00	68,58,95	12,49,01	7,40,71	25,94	4,82,36	6·5	18,82‡	2,71,66	1,91,88	..
	1939-40	**74,25,33**	**5,49,00**	**68,76,33**	**12,72,99**	**7,39,15**	**26,86**	**5,06,98**	**6·8**	**18,89‡**	**2,70,32**	**2,17,77**	..
Madras and Southern Mahratta	1938-39	53,28,25	6,59,33	46,68,92	7,53,86	4,84,86	11,85	2,57,15	4·8	18,14	2,32,79	6,22	..
	1939-40	**53,40,20**	**6,59,33**	**46,80,87**	**7,87,47**	**4,84,75**	**11,64**	**2,91,08**	**5·5**	**10,18**	**2,25,40**	**55,50**	..
South Indian	1938-39	45,94,19	5,64,76‖	40,29,43	5,49,12	3,79,94	7,46	1,61,72	3·5	4,90	1,71,30	..	14,48
	1939-40	**46,24,81**	**5,64,76‖**	**40,60,05**	**5,45,26**	**3,85,16**	**6,94**	**1,53,16**	**3·3**	**3,19**	**1,70,17**	..	**20,20**
Other railways	1938-39	42,37,17	4,33,73	38,03,44	7,12,23	4,14,20	1,52,16	1,45,87	3·4	3,28	1,62,90	..	20,31
	1939-40	**42,74,43**	**4,33,73**	**38,40,70**	**7,08,68**	**4,15,26**	**1,44,89**	**1,48,53**	**3·5**	**2,94**	**1,63,52**	..	**17,93**

Interest on Depreciation and Reserve Fund balances.	1938-39	..	..	..	1,03,13	..	..	1,03,13	..	..	..	1,03,13	..
	1939-40	..	..	..	**1,27,48**	..	..	**1,27,48**	..	..	..	**1,27,48**	..
Net Miscellaneous Receipts and Charges not attributable to any one railway.	1938-39	..	..	..	..	..	..	..	..	..	..	..	17,25*
	1939-40	..	..	..	..	..	..	..	..	..	..	..	**19,56***
Total (Central)	1938-39	7,55,25,60	30,01,25	7,25,24,35	1,00,65,24	66,57,25	2,74,68	31,33,31	4·1	49,15	29,29,59	1,37,32	..
	1939-40	**7,58,61,55**	**28,89,11**	**7,29,72,44**	**1,04,01,12**	**67,36,26**	**2,65,86**	**33,99,00**	**4·5**	**35,37**	**29,10,88**	**4,33,19**	..
Provincial Railways . . .	1938-39	..	..	..	(*a*)1,37	..	..	1,37	..	..	..	1,37	..
	1939-40	..	..	..	**(*a*)14**	..	..	**14**	..	..	..	**14**	..
North Western (Commercial) .	1938-39	1,13,57,94	..	1,13,57,94	15,66,21	10,30,27	29,41	5,06,53	4·5	..	4,43,09	63,44	..
	1939-40	**1,14,63,25**	..	**1,14,63,25**	**15,53,04**	**10,07,02**	**27,85**	**5,18,17**	**4·5**	..	**4,41,65**	**76,52**	..
Non-Commercial (Strategic) (North Western Railway).	1938-39	34,01,14	..	34,01,14	1,31,69	1,91,19	..	—59,50	—1·7	..	1,32,28	..	1,91,78
	1939-40	**33,81,71**	..	**33,81,71**	**1,39,35**	**1,89,45**	..	**—50,10**	**—1·5**	..	**1,30,61**	..	**1,80,71**

	1938-39.	**1939-40.**
‡ Includes payments to Jaipur Durbar	7,69	**7,66**
* Includes recoveries from Travancore Durbar	30	**52**

‖ Includes capital expenditure on Tinnevelly Quilon (Indian State Section).

(*a*) Represent figures on account of Subsidized Companies.

C.—*General results of working of all Indian Railways.*

31. Traffic and mileage.—The more important statistical figures of traffic on all Indian Railways are summarised in the table below :—

Particulars.	Year.	Class I Railways.	Other Railways.	Total of all Railways.
(i) Total route mileage	1935-36	36,307	4,751	41,058
	1936-37	36,125	4,943	41,068
	1937-38	36,134	4,942	41,076
	1938-39	36,573	4,561	41,134
	1939-40	**36,557**	**4,599**	**41,156**
(ii) Number of passengers originating (in thousands).	1935-36	448,865	34,267	483,132
	1936-37	454,743	34,863	489,606
	1937-38	483,933	37,352	521,285
	1938-39	499,143	31,480	530,623
	1939-40	**499,072**	**30,603**	**529,675**
(iii) Number of passenger miles (in thousands).	1935-36	16,871,303	801,055	17,672,358
	1936-37	16,950,704	833,982	17,784,686
	1937-38	17,933,580	913,666	18,847,246
	1938-39	17,987,655	755,138	18,742,793
	1939-40	**17,793,479**	**728,573**	**18,522,052**
(iv) Tons originating (in thousands)	1935-36	78,754	4,195	82,949
	1936-37	78,444	3,962	82,406
	1937-38	83,121	4,168	87,289
	1938-39	84,367	3,994	88,361
	1939-40	**88,360**	**3,819**	**92,179**
(v) Number of ton-miles (in thousands).	1935-36	19,653,041	258,105	19,911,146
	1936-37	20,525,770	263,367	20,789,137
	1937-38	22,479,591	298,249	22,777,840
	1938-39	21,877,949	280,891	22,158,840
	1939-40	**23,191,528**	**300,936**	**23,492,464**

NOTE.—With the separation of Burma from the 1st April 1937 the Burma Railways are no longer under the Indian Railway Board. Therefore, in order that the results from 1937-38 may be comparable with preceding years, figures in respect of the Burma Railways have been excluded from the results for the years 1935-36 and 1936-37. The true figures for all Indian Railways (including Burma) for the years 1935-36 and 1936-37 may be found in the report for 1936-37.

32. Analysis of earnings.—The total earnings of all railways, including those in which the Government of India have no financial interest amounted to Rs. 111·50 crores, of which Rs. 72·56 crores or 65·1 per cent. were from goods traffic, Rs. 30·47 crores or 27·3 per cent. from passenger traffic and Rs. 8·47 crores or 7·6 per cent. from parcels, luggage and other miscellaneous sources of revenue.

32.1. Passenger earnings.—Passenger earnings decreased by about 1 per cent. from Rs. 30·73 to Rs. 30·47 crores. The following table shows the numbers of and earnings from passengers separately for each class, for the four years prior to the great war (1914-18) and for the last seven years. Graphs showing the number of passengers carried and the passenger miles by classes from 1923-24 are also included :—

[Excluding Burma Railways.]

Year.	No. of passengers carried (in thousands).						Earnings from passengers (in thousands of rupees).					
	1st class.	2nd class.	Inter-mediate class.	3rd class.	Season and Vendors' tickets.	Total.	1st class.	2nd class.	Inter-mediate class.	3rd class.	Season and Vendors' tickets.	Total.
1910 . .	630	2,617	10,702	294,908	23,943	332,800	55,82	74,12	94,99	13,90,22	15,58	**16,30,73**
1911 . .	647	2,775	11,409	308,458	25,215	348,504	63,31	80,60	1,08,88	14,92,49	16,56	**17,61,84**
1912 . .	640	2,840	10,508	331,820	26,320	372,128	59,83	79,84	91,37	16,13,25	17,23	**18,61,52**
1913-14 .	649	3,029	12,000	362,787	29,362	407,827	65,50	84,56	1,03,48	17,43,30	18,92	**20,15,76**
1933-34 .	394	4,808	10,557	453,524	*	469,283	73,21	1,37,28	1,11,54	26,00,34	*	**29,24,31†**
1934-35 .	381	4,563	10,316	460,595	*	475,855	74,00	1,36,88	1,11,92	26,23,75	*	**29,46,55**
1935-36 .	361	4,498	10,469	467,804	*	483,132	75,21	1,41,07	1,11,35	26,36,49	*	**29,64,12**
1936-37 .	389	4,329	11,085	473,803	*	489,606	78,26	1,42,09	1,14,54	26,02,32	*	**29,37,21**
1937-38 .	397	4,217	11,324	505,347	*	521,285	79,16	1,44,40	1,22,17	27,62,69	*	**31,08,42**
1938-39 .	385	4,037	11,376	514,825	*	530,623	77,09	1,39,20	1,23,01	27,34,10	*	**30,73,40**
1939-40 .	**355**	**3,959**	**11,838**	**513,523**	*	**529,675**	**69,19**	**1,36,14**	**1,27,91**	**27,14,01**	*	**30,47,25**

* The number of season and vendors' tickets and their earnings included under the respective classes; the former at the rate of 50 single journeys per month.

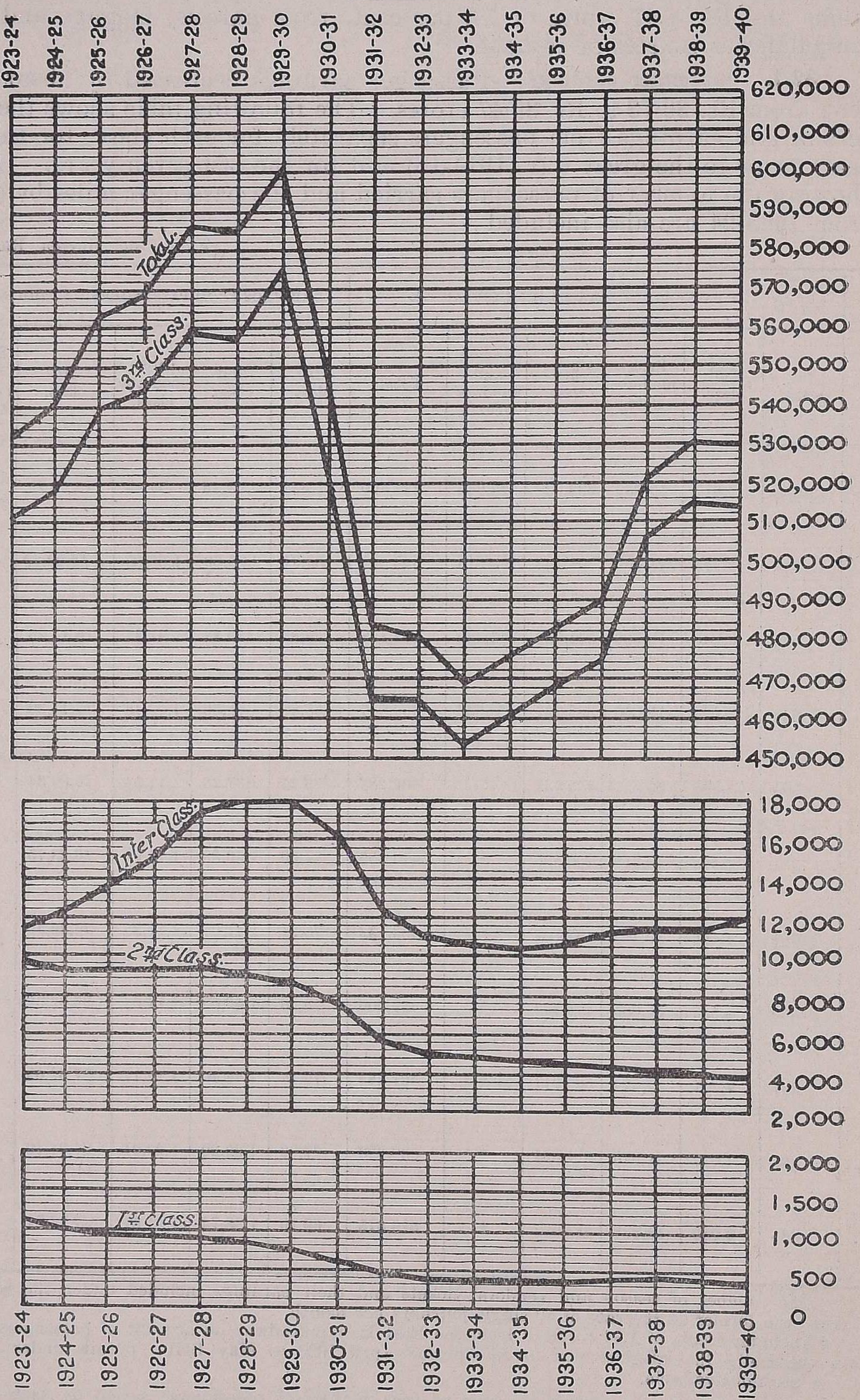
† Includes credit of 1,94 received from the East Indian Railway on account of passengers carried over the Delhi-Ghaziabad section for the period April 1925 to May 1931: details under different classes are not available.

NOTE.—(i) In pre-war reports the sum of the numbers of passengers carried on each separate railway was shown as the total number of passengers carried on all railways. Passengers travelling over two or more railways or two or more gauges of the same railway were thus counted as two or more passengers. The actual number of passengers carried on all railways is in fact the same as the number of passengers originating and this figure has been adopted for " number of passengers carried " in the reports from 1923-24 onwards. As the number of passengers originating is not available prior to 1923-24, the figures of pre-war years have been modified.

(ii) With the separation of Burma from the 1st April 1937 the Burma Railways are no longer under the Indian Railway Board. Therefore, in order that the results for 1937-38 and after may be comparable with preceding years, figures in respect of the Burma Railways have been excluded from the results for 1936-37 and preceding years. The true figures for all Indian Railways (including Burma) for 1936-37 and the preceding years may be found in the Report for 1936-37.

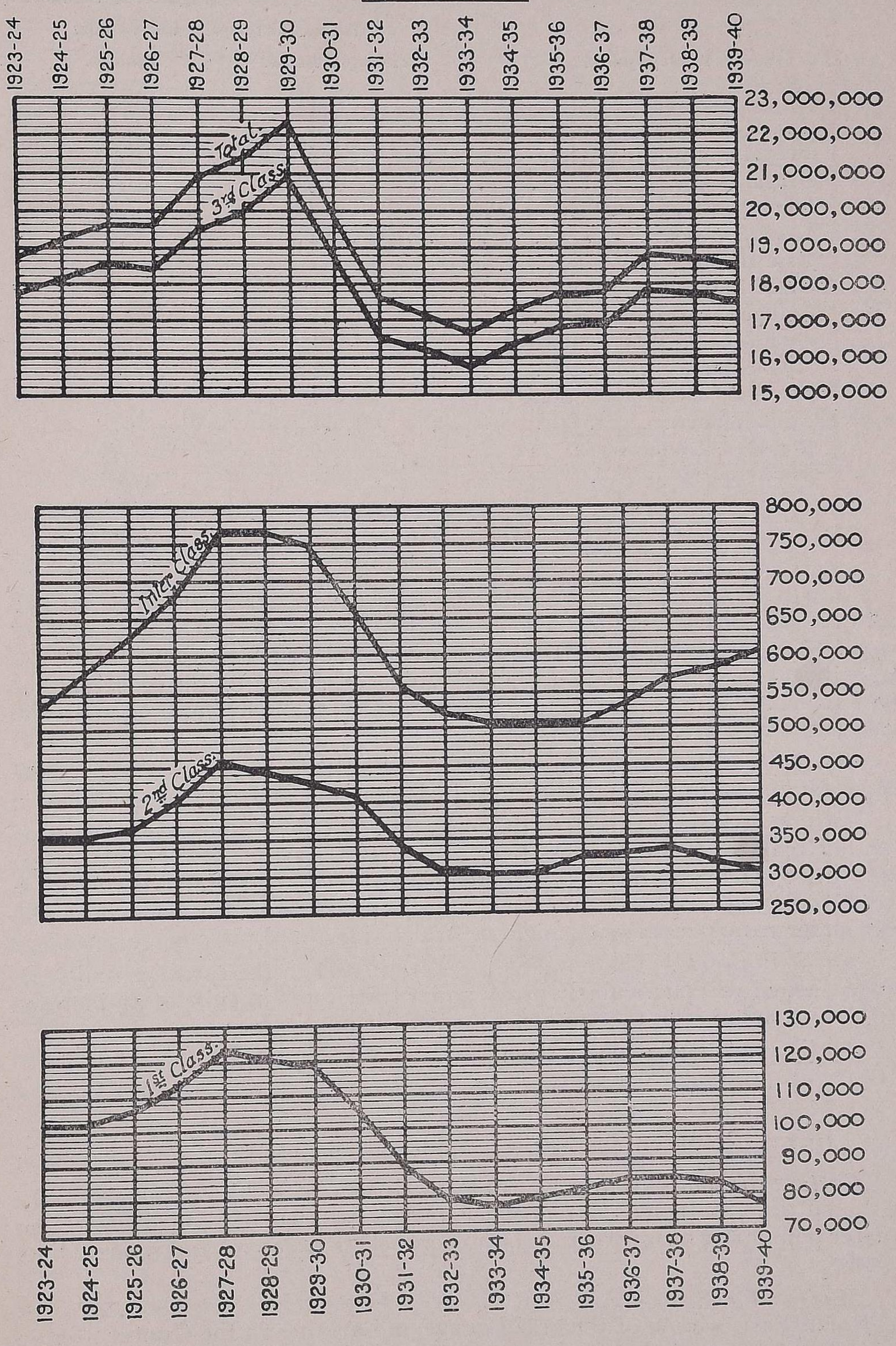
NUMBER OF PASSENGERS CARRIED ON INDIAN RAILWAYS
(EXCLUDING THE BURMA RAILWAYS).

IN THOUSANDS



NOTE.—With effect from 1937-38 the Burma Railways are no longer under the control of the Indian Railway Board. Therefore for purposes of comparison, figures relating to the Burma Railways have been excluded from all the years.

NUMBER OF PASSENGER MILES ON INDIAN RAILWAYS
(EXCLUDING THE BURMA RAILWAYS).
IN THOUSANDS



NOTE.—With effect from 1937-38 the Burma Railways are no longer under the control of the Indian Railway Board. Therefore for purposes of comparison, figures relating to the Burma Railways have been excluded from all the years.

As compared with 1938-39, the number of passengers carried on Class I Railways decreased by about 1 million and earnings by Rs. 22 lakhs. The following statement shows the variations on each railway :—

(Figures in thousands.)

Railway system.	Variation as compared with 1938-39. Passengers carried.	Earnings.
	No.	Rs.
Assam Bengal	+857	+3,82
Bengal and North-Western	-2,013	-1,87
Bengal Nagpur	+74	+2,57
Bombay, Baroda and Central India	-152	-7,61
Eastern Bengal	+2,692	+8,38
East Indian	+17	-17,03
Great Indian Peninsula	+461	+45
Jodhpur	+179	+24
Madras and Southern Mahratta	-621	+3,33
Mysore State	+701	+1,63
H. E. H. the Nizam's State	-204	-24
North Western	+1,572	-5,71
Rohilkund and Kumaon	+420	+1,44
South Indian	-4,834	-11,86
Total	-851	-22,46

It will be seen that the number of passengers carried declined on five railways while the earnings fell off on seven. But the fall in earnings as compared with the figures of 1938-39 is due to the heavy passenger traffic on the railways serving North and Central India consequent on the occurrence of the Kumbh Mela during the previous year. Important fluctuations with the reasons therefor are indicated below :—

Bombay, Baroda and Central India.—Fall in traffic is entirely on the metre gauge due to famine conditions in Rajputana and Kathiawar areas.

East Indian.—Earnings were generally affected by the adverse effect of war particularly on upper class passengers due to restricted overseas travel, less tourist traffic and restrictions on or abandonment of certain cold weather social functions, tournaments, etc. Third class traffic also suffered as the year under review was less auspicious for marriages and pilgrimage.

North Western.—There was general falling off in the earnings under all classes, which was particularly heavy under third class in spite of an increase in the numbers. The factors affecting the earnings were :—

(i) road motor competition,

(ii) indifferent trade conditions accompanied by a restricted spending power of the public; and

(iii) a decline in average lead under all classes.

Eastern Bengal.—Improved trade conditions after the outbreak of the war resulting in increased passenger traffic, particularly third class and greater popularity of return and concession tickets in second and intermediate classes.

Madras and Southern Mahratta.—A cyclone during November 1938 over the North-East Section of the broad gauge and another in the Guntur area in November 1939, and the continuance of the 1938-39 famine conditions well into 1939-40 in the Chingleput District, coupled with low prices for commodities, affected the traffic on the broad gauge adversely. On the other hand, the earnings on the metre gauge improved mainly as a result of the diversion of the Bombay passengers, principally from the Hubli District, to the all-rail route, as the regular coastal steamer services between Marmagao Harbour and Bombay were dislocated after the outbreak of war.

South Indian.—Chiefly under third class due to adverse economic conditions in the country, widespread breaches following heavy rains, and stoppage of emigration of labour to Ceylon.

First class traffic also showed a falling off. This was due to increasing use being made of the road by private motor car owners, Ministers of Government travelling in lower class, and decline in tourist traffic.

32.2. Goods earnings.—The earnings from goods traffic on all railways increased by Rs. 399 lakhs. There were appreciable increases under fuel (mainly coal), miscellaneous goods, metallic ores, cotton raw, fruits and fresh vegetables, salt, iron and steel wrought, provisions, rice and gram and pulse and other grains, while, sugar, refined and unrefined, and oil seeds showed decline.

The tonnage of, and earnings from, the principal commodities carried by Class I Railways during 1939-40 as compared with 1938-39, are shown in the statement below :—

Commodity.	1938-39.		1939-40.		Increase (+) Decrease (—) in earnings.
	No. of tons originating (millions).	Rs. (crores).	No. of tons originating (millions).	Rs. (crores).	Rs. (lakhs).
Increases.					
Fuel for the public and foreign railways.	22·74	11·59	24·19	12·90	+131
Other commodities	10·50	11·77	10·68	12·45	+ 68
Metallic ores	3·64	1·06	3·99	1·51	+ 45
Cotton raw	1·03	2·89	1·07	3·17	+ 28
Fruits and vegetables fresh	3·12	1·27	4·47	1·53	+ 26
Salt	1·35	1·78	1·49	2·04	+ 26
Iron and steel wrought	1·50	2·63	1·54	2·89	+ 26
Provisions	1·25	3·06	1·32	3·29	+ 23
Rice	3·51	3·39	3·89	3·60	+ 21
Gram and pulse and other grains	2·57	3·31	2·70	3·51	+ 20
Materials and stores on revenue account.	13·80	2·95	14·06	3·12	+ 17
Wheat	1·76	2·40	1·85	2·54	+ 14
Military traffic	0·32	0·31	0·43	0·45	+ 14
Fodder	1·32	0·87	1·33	0·97	+ 10
Wood unwrought	1·26	0·85	1·32	0·93	+ 8
Molasses	0·88	1·01	0·79	1·07	+ 6
Railway materials	2·96	0·47	3·60	0·52	+ 5
Jute raw	1·03	1·18	1·04	1·22	+ 4
Marble and stone	3·27	0·91	2·70	0·94	+ 3
Cotton manufactured	0·72	2·59	0·73	2·61	+ 2
Kerosene oil	0·80	1·58	0·80	1·59	+ 1
Tobacco	0·33	0·88	0·33	0·89	+ 1
Livestock	0·18	0·55	0·19	0·56	+ 1
Decreases.					
Sugar, refined and unrefined	1·19	2·16	0·81	1·33	— 83
Oilseeds	2·74	3·60	2·44	3·34	— 26
Petrol	0·32	1·17	0·33	1·16	— 1
Manures	0·28	0·19	0·27	0·18	— 1
TOTAL	84·37	66·42	88·36	70·31	+389

CHAPTER III.

NEW CONSTRUCTION AND ENGINEERING WORKS.

33. Capital Expenditure.—At the end of March, 1940, the total capital at charge on all railways, including those under construction, amounted to Rs. 852·59 crores, of which Rs. 758·62 crores was capital at charge on State-owned Railways inclusive of premia paid in the purchase of Companies' lines. The remainder, Rs. 93·97† crores, represented capital raised by Indian States, Companies and District Boards.

The capital at charge of State-owned Railways is composed as follows:—

	£
Liability and debt incurred in purchase of Railways .	150,106,630
Less liability and debt cancelled by the operation of Annuities and Sinking Funds	– 29,284,941
Net amount outstanding	120,821,689*
	Rs. (omitting 000)
Direct expenditure by Government	5,97,52,59
The above sterling figure converted into rupees . .	1,61,08,96*
Grand Total .	7,58,61,55

By far the greater portion of this amount, namely Rs. 7,29,72,44,000 is Government Capital and only 1-25th or Rs. 28,89,11,000 is owned by Companies. These figures include Rs. 33,81,71,000 on account of capital expenditure to the end of March, 1940, on strategic lines.

33.1. The total capital outlay on all railways during 1939-40 was Rs. 5·90 crores, of which Rs. 4·48 crores were spent on State-owned Railways. The following statement shows how this outlay of Rs. 4·48 crores was distributed between open line works, rolling-stock and new line, similar figures being given for the previous four years and for 1913-14.

Year.	Open Lines.			New lines.	Grand Total.
	Works including Stores and general charges.	Rolling-stock.	Total.		
	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.
1913-14§	9·30	7·31	16·61	1·86	18·47
1935-36§	2·24	0·05	2·29	0·29	2·58
1936-37 including Burma .	1·08	—0·80	0·28	..	0·28
1936-37 excluding Burma .	1·16	—0·66	0·50	..	0·50
1937-38	0·63	—0·06	0·57	—0·05	0·52
1938-39	1·78	0·49	2·27	0·06	2·33
1939-40	2·89	0·89	3·78	0·70	4·48

* £2,575,000 representing share capital of the Great Indian Peninsula Railway paid off during 1925-26 has been converted at the average rate of exchange for that year and the balance of £118,246,689 at the rate of 1*s.* 6*d.* to the rupee.

† Includes Rs. 8,87,000 representing outlay on the Alnavar-Dandeli Railway.

§ Includes Burma.

NOTE.—A part of the capital expenditure on Provincial railways (14,61) shown separately in previous years has been included under direct expenditure by Government (13,22) and the balance (1,39) representing expenditure on a siding has been omitted.

33.2. The distribution of the capital outlay in 1939-40 over the different State-owned lines is shown in the summary below:—

(Figures in lakhs.)

Railways.	Open Lines.			New lines.	Grand Total.
	Works, etc.	Rolling-stock.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.
Bengal Nagpur . . .	22	10	32	..	32
Bombay, Baroda and Central India	11	6	17	..	17
Eastern Bengal . . .	3	2	5	..	5
East Indian	1,60	64	2,24	..	2,24
Great Indian Peninsula . .	9	—5	4	—1	3
Madras and Southern Mahratta .	3	9	12	..	12
North Western . . .	25	—6	19	64	83
South Indian	24	7	31	..	31
Other Indian Railways . .	32	2	34	7	41
Total .	2,89	89	3,78	70	4,48

34. Mileage of lines opened during 1939-40.—73·88 miles of railways were opened to public traffic during the year, the whole of this mileage being on the 3′ 3⅜″ gauge.

Name of line.	Gauge.	Mileage.	Owner.	Working Agency.	Date of opening.
Khadro-Nawabshah . .	3′ 3⅜″	30·72	State Line .	Jodhpur Railway.	20th November, 1939.
Kunkavav Dardi . . .	3′ 3⅜″	7·34	Indian State Line	Gondal Railway	19th March, 1940.
Jhunjhunu to Loharu . .	3′ 3⅜″	35·82	Ditto .	Jaipur State Railway.	20th November, 1939.
Total .		73·88			

35. Mileage of lines sanctioned in 1939-40.—During the year under review sanction was accorded to the construction of a new line by the Jamnagar and Dwarka Railway from Jam-Wanthali to Kalawad a length of 16·00 miles on the metre gauge.

36. Lines under active construction on 31st March 1940.—At the end of the financial year 1939-40 the mileage of new lines under active construction was as follows:—

	Miles.
5′ 6″ gauge	88·34
3′ 3⅜″ „	235·79
Total .	324·13

The lines under active construction are given in the table below which also shows the construction agencies and the extent of progress made.

Name of line.	Gauge.	Mileage actually under construction.	Working Agency.	* Progress of work (proportion completed on the 31st March 1940).
(i) Phalodi Pokaran	3′ 3⅜″	35·40	Jodhpur Railway.	0·52
(ii) Sagar-Talaguppe	3′ 3⅜″	9·43	Mysore State Railway.	0·69
(iii) Mudkhed-Adilabad	3′ 3⅜″	100·69	N. S. Railway.	0·50
(iv) Sadulpur-Rewari (portion)	3′ 3⅜″	31·01	Bikaner State Railway.	0·59
(v) Sikar-Fatehpur Section	3′ 3⅜″	29·26	Jaipur State Railway.	0·99
(vi) Hadmatia-Dhrol-Jodiya Extension.	3′ 3⅜″	30·00	Jamnagar-Dwarka.	0·70
(vii) Sind Right Bank Feeder—				
(a) Larkana to Silra Shahdad Kot.	5′ 6″	32·16	N. W. Railway.	0·75
(b) Silra Shahdad Kot to Jacobabad.	5′ 6″	51·82		
(viii) Cochin Railway Extension to link with the Harbour Railway (Idappali-Ernakulam Extension).	5′ 6″	4·36	S. I. Railway.	0·87
Total	..	324·13		

* 0·30 signifies that 3/10th of the work has been done.
0·50 ,, that half the work has been done.
1·00 ,, completion of the work.

37. Lines sanctioned in 1939-40.

37.1. Jamwanthali-Kalawad.—The construction by the Jamnagar-Dwarka Railway of a metre gauge railway line from Jamwanthali to Kalawad was sanctioned in October 1939. The line, which will be about 16 miles in length, will lie entirely within Nawanagar State territory, and is intended to develop the area through which it will pass. However, owing to priority having to be accorded to certain other urgent relief works in the State, the Nawanagar Durbar decided, in March 1940, to postpone temporarily construction work on the line.

38. Surveys.—On account of the uncertain conditions regarding availability of railway material, etc., prevailing as a result of the outbreak of the war, very few surveys were undertaken during the year. Certain important surveys such as a fresh traffic survey of the Tanjore-Pattukkottai and Arantangi-Karaikkudi Railways, a traffic survey of the Mettupalaiyam-Satyamangalam-Chamrajnagar Railway as also a survey in connection with the Amingaon Brahmaputra Railway Bridge project had to be deferred for this reason.

On the East Indian Railway, however, a survey was made in respect of a third (Down slow) line between Khana Junction and Ondal and plans and estimates were prepared. Similarly, the survey for the re-alignment and re-grading of the Jamrao-Jhudo line of the Jodhpur Railway was sanctioned in July 1939 and completed by December.

The detailed survey in connection with the retirement of the main Eastern Bengal Railway line between Ishurdi and Abdulpur to meet the possibility of an attack by the Ganges about which a reference was made in the last year's report, was completed during the year, and as the scheme had been sanctioned by the Railway Board, land acquisition proceedings, and the preparation of detailed estimates and designs for the bank and spill openings were put in hand.

39. Lines under construction during 1939-40.—With the exception of the Sind Right Bank Feeders Railway, all the lines under construction during the year were railways projected within Indian State territories. The following is a brief account of the progress made on each during the year :—

39.1. Phalodi-Pokaran.—Construction work on this line, which is intended to serve the important town of Pokaran, was started in March 1939, and such good progress was maintained during the year by the Jodhpur Railway Administration that it is expected to open the entire length of 35·40 miles to traffic fairly early in the coming year.

39.2. Sagar-Talaguppe.—Progress on this line in the Mysore State, which was started in June 1938, was slow on account of delay in the receipt of permanent way and other materials. It is not, therefore, expected that it can be opened to traffic until the new year is well advanced.

39.3. Mudkhed-Adilabad.—This line of about 100 miles was commenced in February 1939 with the object of developing the extensive mineral, forest and agricultural resources of the Adilabad district of His Exalted Highness the Nizam's Dominions. The line will pass for the most part through rugged country and though there are no large rivers to cross, yet the smaller rivers and nullahs will, it is estimated, necessitate 21 major and 172 minor bridges. Good progress was maintained on earth and masonry work of which about 75 per cent. was completed during the year, but the advent of the war has brought in the difficulty of procuring permanent way materials and the opening of the line will therefore be delayed.

39.4. Sadulpur-Rewari.—As reported last year, out of a total of 87·45 miles two sections aggregating 56·44 miles, *viz.*, Sadulpur to Loharu and on to Mohindergarh, were opened by February 1939. Progress was maintained on the work on the third section from Mohindergarh to Rewari, 31·01 miles.

39.5. Sikar-Bissau.—Good progress was made on the Sikar-Fatehpur, Sikar section of this line, 29·26 miles, and the section was made ready for opening very early in the new year. Work on the remaining 18·62 miles has, however, been deferred.

39.6. Hadmatia-Jodiya.—Progress on this line was slower than was anticipated last year due in large measure to the delay in receipt of materials and by the end of the year only about 70 per cent. of the construction work was done.

39.7. Sind Right Bank Feeder.—Owing to the importance of this line as required to provide adequate facilities for the transport of agricultural produce from the area on the right bank of the Indus, construction work was pushed on and substantial progress made by the end of the year, so as to permit of its opening for traffic as early as possible in the new year.

39.8. Shoranur-Cochin Railway Harbour Extension.—This work was mentioned in the reports for 1937-38 and 1938-39. It was completed during the year under review but for reasons connected with the completion of the railway within the port area, the opening of the extension had to be deferred.

40. Lines opened during 1939-40.

40.1. Kunkavav-Derdi.—This line, 7·34 miles long, which was reported as being under construction last year, was opened for traffic on the 19th March 1940. It lies wholly in the Gondal State and will serve an area which, before its construction, was not served adequately even by roads.

40.2. Jhunjhunu-Loharu.—This extension of the Jaipur State Railway, 35·82 miles long, which was designed to provide transport facilities near the northern boundary of the Jaipur State, was completed and opened on the 20th November 1939.

40.3. Khadro-Nawabshah.—The Khadro-Nawabshah section of the Jodhpur Railway, a length of 30·72 miles, was also opened to traffic on the 20th November 1939.

This line together with the existing Mirpurkhas-Khadro line, now provides a through metre gauge connection from Nawabshah, on the main line of the North Western Railway, to Mirpurkhas, an important junction station on the Jodhpur Railway.

41. Important New works.—No new works of any magnitude were undertaken during the year under review.

42. Open line improvements.

42.1. Realignment and transitioning of main line curves on the East Indian Railway.—Out of 568 curves on the main lines of the East Indian Railway, only about a hundred had been realigned and transitioned. It was, however, felt that for the improvement of running at fast speed on curves, it was necessary to realign and recondition all curves and accordingly an estimate amounting to about Rs. $1\frac{3}{4}$ lakhs was prepared for the treatment of all main line curves on the railway and sanctioned in December 1939.

42.2. Coimbatore Station, South Indian Railway.—Progress was maintained on the remodelling of this station, and among the major works completed during the year were the provision of passenger yard facilities with administrative offices, a combined booking and parcels office, a waiting shed for passengers and waiting rooms for upper class passengers and also Indian and European refreshment rooms.

42.3. Remodelling Locomotive Yard at Delhi, North Western Railway.—Owing to the fact that the locomotive yard at the Delhi Main station did not provide adequate facilities for the economical handling of the engines homed in the locomotive shed and that difficulty was also experienced in the movement of coal wagons, necessitating the use of the 85′ engine turntable as a bridge, a scheme to remodel the locomotive yard at Delhi Main was sanctioned. In addition, sanction was given to extend the goods platform at New Delhi and to provide a shed thereon.

42.4. Purchase of land for goods shed, Delhi, North Western Railway.—Taking into consideration the probable future development of New Delhi and Old Delhi which will also entail the extension of the New Delhi (Sadar) goods station and yard, sanction was accorded to a proposal by the North Western Railway to acquire at an estimated cost of Rs. 3,71,000, a strip of waste land lying between the Gerstin Bastian Road, Delhi, and the New Delhi (Delhi Sadar) goods yard which was being administered by the Delhi Improvement Trust.

42.5. Permanent-way renewals.—(i) *Assam Bengal Railway.*—On the Assam Bengal Railway good progress was made with the programme for renewal of 50 lb. rails with 60 lb. ones. The works of relaying 46 miles of line between Safrai and Tinsukia and 72 miles of the Gauhati branch between Lanka and Digaru with 60 lb. B. S. R. rails were also taken in hand.

(ii) *Eastern Bengal Railway.*—On this railway about 39 miles of broad gauge track were relaid with 90 lb. rails. Of this, 19 miles consisted of complete relaying and the rest comprised rails being linked on existing sleepers. Track on branch lines and station yards was also relaid with second hand rails released from this relaying.

(iii) *East Indian Railway.*—On the Howrah Division 45 miles of main line track were relaid with 90 lb. rails and on the Dinapore Division 31 miles were relaid with 90 lb. rails.

(iv) *North Western Railway.*—An aggregate of about 39 miles on the main lines of the North Western Railway were relaid with 90 lb. rails.

42.6. Water supply to Basin Bridge and Madras Central stations, Madras and Southern Mahratta Railway.—Water for locomotives at Basin Bridge and Madras Central stations, was being taken from the Madras Corporation at a cost of Rs. 1-8 per thousand gallons. During a scarcity of water in 1939, the railway had to provide auxiliary arrangements which increased the already high cost of water. As good water was available in adequate quantities at

mile 7/5-19, of the North East section of the railway, a scheme was prepared to provide for an independent railway supply at an estimated cost of Rs. 2·25 lakhs covering the installation of the necessary pumps and pipe lines to pump the water to the Basin Bridge and the Madras Central stations It is anticipated that these arrangements will reduce the cost of water for railway purposes to about 6 annas per thousand gallons.

42.7. Raising, doubling and bridging the main line between Sonepur and Chupra, Bengal and North-Western Railway.—A full description of this scheme was given in the report for 1937-38. Only 50 per cent. of the work could be completed by the end of the year as it was held up owing to delay in the acquisition of the necessary land. It is expected that the work will take another year for completion.

42.8. New hospital at Lahore.—Mention was made of this work in the report for 1938-39. The hospital, which was completed on 3rd December 1938, has been named the Cairns Hospital after Dr. James Cairns who rendered distinguished service as the Chief Medical and Health Officer of North Western Railway from 1st October 1927 till his sudden death on 16th December 1939.

43. Important Works Sanctioned.

43.1. Additional line facilities on the Moradabad Division, East Indian Railway.—During the busy season of 1938-39, serious congestion of traffic was experienced on the Moradabad Division which had its repercussions also on the adjacent divisions and on all traffic on the upper part of the East Indian Railway System. An examination of the points of congestion and of the operating difficulties experienced indicated that the existing lines and terminal facilities on this division were inadequate to deal promptly with the volume of traffic offering. Consequently a comprehensive scheme was drawn up by the East Indian Railway with a view to enable the existing traffic to move both freely and expeditiously and also to provide a small margin for any rise in traffic in the future.

The works included in the scheme were, briefly, 10 new crossing stations, additions and alterations to 5 station yards, a new bridge at Shahjahanpur and the doubling of certain short lengths of line, etc. The cost of the works was estimated at about Rs. 22 lakhs, out of which it was proposed to spend about Rs. 6 lakhs during the year under review. The scheme was generally approved and the commencement of various works authorised during the year.

43.2. Regirdering the Dufferin Bridge at Benares, East Indian Railway.—The existing Dufferin Bridge at Benares was opened to traffic as long ago as 1st October 1887. For several years it had been realised that it was essential to regirder the bridge, as the strength of the existing girders is only 60 per cent. of the standard laid down and there is a permanent speed restriction of 10 miles per hour for all traffic. The bridge, moreover, carries only a single line and forms a bottle neck for the traffic to the west of the United Provinces and the Punjab.

A project for renewing the girders of the bridge was accordingly prepared providing for double line girders to M. L. standard together with a separate overhead roadway 25′ wide for vehicular traffic and two footpaths 4′ wide on each side. The total cost of the work is estimated at Rs. 83 lakhs but of this a sum of Rs. $25\frac{1}{4}$ lakhs is debitable to the United Provinces Government, leaving Rs. $57\frac{3}{4}$ lakhs to be borne by the railway. The work was sanctioned in August 1939.

43.3. Regirdering the Narbada Bridge at Mortakka, Bombay, Baroda and Central India Railway.—The existing bridge over the Narbada river at Mortakka was constructed about 60 years ago and is now required to carry not only a larger volume of traffic but also appreciably heavier engines. The regirdering of the bridge to make it suitable for present day requirements was therefore an urgent necessity, and an estimate amounting to about

Rs. 17 lakhs was accordingly sanctioned in April 1939. The work will take two years to complete as the bridge is a large one consisting of 14 spans of 200 feet girders. The regirdering will be done with the necessary alterations of the piers. The designs for the regirdering, which have been prepared in India embody a new and economical type of welded strut member, the adequacy of which has been proved by tests carried out in advance.

44. Bridge strengthening programme.

44.1. Mansi Bhaptiahi Section—Bengal and North-Western Railway.—On account of a change in the course of the Kosi river the bridges on the section between Mansi and Sonbarsa Katchary have to take the greater portion (about 83 per cent.) of the Kosi water in addition to their previous discharge and it was therefore found necessary to strengthen the pitching of the guide banks, to modify the shape of the pitched abutments, to provide bulb abutments with aprons of stone where necessary and to provide additional pitching round the wells of these bridges. An estimate amounting to Rs. 2,36,028 for the work was sanctioned in October 1939 and it is anticipated that the work will be completed in about a year.

44.2. Regirdering canal bridge at mile 2/15-16, Eastern Bengal Railway.—The abutments of the Cut canal bridge at mile 2/15-16 on the Sealdah-Dum Dum section were found to have been sinking and sliding. After observations extending over several years, it was ultimately decided to rebuild the bridge with two new 133 feet girder spans and new abutments. The work was taken in hand during the year at a cost of Rs. 3·39 lakhs and is being carried on under traffic, as the bridge carries four main lines, all of which have to be kept open to traffic.

44.3. Aie Bridge, Eastern Bengal Railway.—As reported last year, the bridge on the Aie river at mile 247/3 was damaged and outflanked in July 1938, through communication being restored by temporary means at the time. During the year under review the guide bund was extended, the pier that had been washed away was replaced by another pier at a new site and two 40 feet spans were replaced by a 100 feet span at a cost of Rs. 2·59 lakhs. The right and left guide banks and the spur were also restored at a further cost of Rs. 2·71 lakhs.

44.4. Tarrang Bridge, Eastern Bengal Railway.—Owing to a change in the regime of the Tarrang river and an increase in the volume of its discharge, it was found necessary to construct a new bridge with one 40 feet span and two 100 feet span girders to the east of the existing bridge over the Tarrang. The work which is estimated to cost Rs. 2·51 lakhs was put in hand.

44.5. Hardinge Bridge, Eastern Bengal Railway.—During the working season before the floods of 1939 an extension of the Raita protection bank from chainage 40 to 45 was carried out, necessitated by the formation of an embayment at its head. The bank was also realigned between chainages 26·33 and 40. Pitching stone to the extent of 5 lakhs cubic feet was added to the protection around the piers of the bridge and shortages of stone were made up to the extent of 6·07 lakhs cubic feet in the apron and slopes of the Right Guide Bank.

The work of extending the Left Guide Bank by 5,000 feet was continued, about 97·4 lakhs cubic feet of earthwork and 36·91 lakhs cubic feet of stone pitching being carried out.

Emergency arrangements during the flood season of 1939 were continued.

Survey work on the proposed realignment of the main line between Ishurdi and Abdulpur was completed and land acquisition proceedings taken in hand.

CHAPTER IV.

TRANSPORTATION.

A.—*Operating*.

45. Volume of traffic handled.—The volume of business handled on railways is best indicated by figures of " passenger miles " for passenger traffic and " net ton miles " for goods traffic. These terms represent the total number of passengers and tons carried respectively multiplied by the miles over which they were moved. In the following statement the figures of Class I Railways for the year under review are compared with those for the previous two years. The net ton miles shown in the table do not include the tonnage hauled by purely departmental trains but this was only about 2 per cent. of the total.

(Figures in thousands.)

Particulars.	Class I Railways.			
	1937-38.	1938-39.	**1939-40.**	**Percentage of increase (+) or decrease (—) compared with 1938-39.**
Passenger miles . . .	18,076,399	17,987,655	**17,793,479**	**—1·08**
Net ton miles . . .	22,043,046	21,394,147	**22,671,560**	**+5·97**

NOTE.—The figures of Mysore State Railway have been included in those for 1937-38 for purposes of comparison.

46. Train miles.—The number of train miles run to carry the above traffic is given in the table below :—

(Figures in thousands.)

Particulars.	CLASS I RAILWAYS.											
	BROAD GAUGE.				METRE GAUGE.				NARROW GAUGE.			
	1937-38.	1938-39.	**1939-40.**	**Percentage of variations with 1938-39.**	‡ 1937-38.	1938-39.	**1939-40.**	**Percentage of variations with 1938-39.**	‡ 1937-38.	1938-39.	**1939-40.**	**Percentage of variations with 1938-39.**
Passengers (including proportion of mixed) train miles.*	71,858	73,494	**72,481**	—1·38	33,903	34,986	**33,953**	—2·95	2,681	2,637	**2,565**	—2·73
Goods (including proportion of mixed) train miles.†	47,280	48,018	**50,462**	+5·09	18,311	18,758	**19,457**	+3·73	1,831	1,754	**1,825**	+4·05

* Includes mileage of electric locomotive and electric multiple unit trains but excludes departmental.

† Includes mileage of electric locomotive trains but excludes departmental.

‡ Includes figures for the Mysore State Railway for purposes of comparison.

Passenger train miles decreased by 1·38, 2·95 and 2·73 per cent. on the broad, metre and narrow gauges respectively. On the other hand, goods train miles increased by 5·09 per cent. on the broad gauge, 3·73 per cent. on the metre gauge and 4·05 per cent. on the narrow gauge. Detailed figures of train and engine miles performed by individual Class I Railways are given in Statements 17 and 32 and those for each Class II and III Railways in Statement 37 of Volume II of this report.

The trend of the volume of traffic and work done during 1929-30, 1932-33 and the last four years on Class I Railways is illustrated below on the basis of index figures :—

Year.	* Passenger miles.	* Passenger train miles.	Coaching vehicle miles.	* Freight ton miles.	* Goods train miles.	Wagon miles.
1929-30	100	100	100†	100	100	100†
1932-33	77	87	89†	81	81	83†
1936-37	79	96	94†	100	97	100†
1937-38	84	102	96†	110	103	108†
1938-39	83	104	98	107	105	108
1939-40	**83**	**102**	**96**	**113**	**110**	**112**

* Includes figures for Mysore State Railway.
† Excludes Mysore State Railway for which figures are not available.

The above figures show that the railway administrations have not always found it practicable to adjust their train services to the drop in passenger miles, train miles showing in fact a slight increase. This is due to the endeavours of railways to provide more frequent service to the travelling public. In the year under review, however, there is evidence of a reduction in train mileage. The loads of trains have been adjusted to some extent and this is reflected in a decrease in coaching vehicle miles—although not so marked as in the case of passenger miles.

47. Shunting and "Other engine" miles.—These refer to engine mileage of an unproductive character, *viz.*, shunting, light and assisting engine mileage. This was equivalent to about 19 per cent. of the total engine miles (including departmental). The departmental train and engine mileage—which is also not directly productive—amounted to 10·2 million miles or about 4 per cent. of the total. As shunting miles form the greater proportion of unproductive mileage, *i.e.*, about 68 per cent. of the total unproductive engine miles, the following table has been prepared to show the ratio per 100 train miles on the passenger and goods services on Class I Railways :—

Particulars.	Broad gauge.				Metre gauge.			
	1937-38.	1938-39.	**1939-40.**	**Percentage of variations with 1938-39.**	1937-38.	1938-39.	**1939-40.**	**Percentage of variations with 1938-39.**
Shunting miles per 100 train miles (Passenger and proportion of mixed).	5·06	4·96	**5·12**	**+ 3·23**	4·36	4·71	**4·83**	**+2·55**
Shunting miles per 100 train miles (Goods and proportion of mixed).	33·3	33·9	**33·0**	**— 2·65**	33·9	34·3	**33·6**	**—2·04**

48. Engine performance.—The work done by engines is generally judged by the figure "engine miles per engine per day". This is expressed either in relation to the number of engines on the line or engines actually in use. On the former basis the daily mileage increased from 79 to 81 on the broad gauge and from 76 to 78 on the metre gauge, and on the latter basis there was an increase from 115 to 117 on the broad gauge but a decrease from 110 to 107 on the metre gauge. On the broad gauge the percentage of engines under or awaiting repairs in mechanical and transportation workshops decreased from 18·9 in 1938-39 to 17·6 per cent. in 1939-40, while on the metre gauge it increased slightly from 12·8 to 13·2.

49. Passenger trains.—Various factors have to be taken into consideration in arranging for passenger train services, the chief among them being changes in the nature and flow of traffic. The railways endeavour to ascertain these by carefully scrutinising the wishes expressed by private individuals and public bodies. Finally time-tables are drawn up half-yearly keeping in view both the public and railway needs. Some railways refer their proposals for changes in the time-tables to their local Advisory Committees for comment and criticism before they are finally adopted. In the year under report owing to the war conditions train services had to be modified partly as a result of increased demands for military movements and partly of the more pressing need for economy. The more important of the changes effected are indicated below :—

49.1. Mail and Express trains.—*Assam Bengal Railway.*—On the outbreak of war in September 1939, the passenger and mixed train mileage was curtailed by about 20 per cent. The run of two express trains between Chittagong and Laksam was curtailed. Consequently additional stops were provided on mail and fast trains to meet public demand.

Bombay, Baroda and Central India Railway—Broad Gauge.—(i) No. 5 Down Kathiawar Mail leaving Bombay Central at 21-30 hours was timed to arrive at Viramgam at 8-0 hours instead of 8-25 hours and was booked to run through Ambli Road and Jakhvada stations.

(ii) No. 10 Up Kathiawar Mail was timed to leave Viramgam at 19-20 hours instead of at 19-25 hours and run from Ahmedabad in advance of No. 2 Up Gujrat Mail arriving at Bombay Central at 6-45 hours. This was booked to run through Jakhvada, Ambli Road and Sabarmati.

(iii) No. 2 Up Gujarat Mail was timed to leave Ahmedabad at 22-0 hours instead of at 21-20 hours and run to the timings of No. 10 Up Kathiawar Mail arriving Bombay Central at 7-25 hours.

East Indian Railway.—One express train each way between Lucknow and Delhi was withdrawn.

Great Indian Peninsula Railway.—From November 1939 the running of the "**Deccan Queen**" was discontinued. From October 1939 the weekly running of the "**Indian Imperial Mail**" was cancelled.

49.2. Suburban trains.—*Bombay, Baroda and Central India.*—During the down evening peak, additional trains were provided on the Church Gate-Bandra section amounting to an increase of 19 per cent. in capacity; a corresponding reduction was, however, made during the non-peak period.

49.3. Other passenger trains.—*Assam Bengal Railway.*—27 mixed trains and two passenger trains were cancelled and the run of 8 mixed trains was curtailed. In order, however, to meet the needs of traffic, the run of two mixed trains was extended and 3 new mixed trains and one passenger train were introduced.

Bengal and North-Western Railway.—Passenger train services were reduced by 10 per cent. to conserve power for possible increased goods movement.

Bombay, Baroda and Central India Railway—Broad Gauge.—The provision of a triangle at Nagda enabled the Ratlam-Nagda-Ujjain service to be worked with an "H" class engine to accelerated timings as under :—

(*a*) 97 Down was timed to leave Ratlam at 8-35 hours instead of at 6-55 hours and arrive at Ujjain at 11-8 hours instead of at 10-40 hours.

(*b*) 100 Up was timed to leave Ujjain at 18-0 hours instead of at 17-25 hours and arrive at Ratlam at 20-50 hours as before.

78 Up leaving Amalner at 15-30 hours for Nandurbar was extended to Surat, arriving there at 5-5 hours so as to connect with the main line trains No. 7 Down Passenger, 12 Up Passenger and Up "**Flying Ranee**" at Surat.

Metre gauge.—(i) One fast passenger train each way between Kalol and Ahmedabad was extended to run from and to Mehsana.

(ii) One passenger train was introduced between Sabarmati and Ahmedabad.

(iii) Four local fast passenger services were re-introduced between Ajmer and Beawar and the run of two passenger trains between Sabarmati and Ahmedabad was extended from and to Kalol.

(iv) Two passenger trains between Muttra Cantonment and Brindaban and two between Bandikui and Jaipur were cancelled.

Narrow gauge.—During the busy season two fast mixed trains were introduced between Anklesvar and Rajpipla.

East Indian Railway.—37 passenger and 2 mixed trains were withdrawn from service. In order, however, to minimise inconvenience to the public 8 new passenger trains were introduced and the run of five passenger trains and one mixed train was extended over selected sections. In addition, four sentinel coach trips were introduced between Aligarh and Hathras Kilah. These changes had the effect of reducing the passenger train miles by 1,712 per day.

Great Indian Peninsula Railway.—The run of two passenger trains between Kalyan and Atgaon was altered to Kalyan and Asangaon. Two passenger trains were converted into mixed trains on the Pulgaon-Arvi, Itarsi-Nagpur and Badnera-Amraoti branches.

The run of two mixed trains (Murtazapur-Karanja) was extended to Yeotmal. Two additional trains each way were introduced between Kurla and Chembur. The following trains were cancelled :—

Trains.	*Section.*
2 passenger trains	Bhusaval-Jalgaon.
2 ,, ,,	Jubbulpore-Katni.
2 ,, ,,	Saugor-Damoh.
2 mixed trains	Agra-Hatshamshabad.

Madras and Southern Mahratta Railway.—Every attempt was made to keep the passenger and mixed train mileage as low as possible by making suitable adjustments in the train services. The comparative figures are :—

	Passenger and mixed train miles (per day).	
	Broad gauge.	Metre gauge.
1st April 1938	11,973	12,713
1st April 1939	11,991	12,378
1st October 1938	12,033	12,864
1st October 1939	12,033	12,378
31st March 1938	11,991	12,479
31st March 1939	11,887	12,378

The following trains were cancelled :—

	Between.
Broad gauge—	
2 passenger trains	Katpadi and Jalarpet.
1 workmen train	Rayapuram and Basin Bridge.
Metre gauge—	
2 local trains	Hubli and Dharwar.
2 passenger trains	Mormugao Harbour and Sanvordem.
2 mixed trains	Sanvordem and Collem.

Mysore.—To maintain connection with Madras and Southern Mahratta Railway Hubli-Poona mail trains, two shuttle trains were introduced on the Arsikere-Hubli section. Two shuttle trains between Davangere and Harihar were cancelled.

Rohilkund and Kumaon Railway.—As an economy measure one train each way was cancelled on the Bareilly-Kasganj, Pilibhit-Mailani and Mailani-Lucknow sections.

49.4. Speeds.—*Assam Bengal Railway.*—The maximum sanctioned speeds were increased as follows :—

Section.	Miles per hour. From	To
Karimganj-Baraigram	25	35
Baraigram-Dullabcherra		
Baraigram-Kalkalighat		
Lumding-Lanka	35	45

The maximum permissible speed of nine other sections was also increased from 35 to 37 miles.

Bengal and North-Western Railway.—The permissible maximum speed for passenger trains was raised from 40 to 45 miles per hour on certain sections.

East Indian Railway.—There was no significant change in the booked speed of any of the mail, express or passenger trains. However, the maximum permissible speed over the Moghal Sarai-Partabgarh-Saharanpur section was increased from 60 to 65 miles.

Madras and Southern Mahratta Railway.—The following express trains were accelerated :—

	Time saved. Minutes.
Bangalore Express—	
Madras to Bangalore	20
Bangalore to Madras	10
Bombay Express—	
Madras to Raichur	20
Raichur to Madras	40

Mysore Railway.—Two passenger trains were speeded up between Bangalore City and Guntakal resulting in a saving of 1½ hours.

North Western Railway.—For the convenience of the travelling public, the speeds of the following trains were increased :—

Trains.	Section.	Miles per hour. From	To
Sind Expresses	Karachi-Lahore (on certain portions).	40 and 45	50
Calcutta Mails	Delhi-Ambala Cantt.	35	40
33 Up Express	Lahore-Lala Musa	30	40
Quetta Mail	Sibi-Quetta	9 to 22	12 to 29

The speed of certain other passenger trains was increased on the following sections :—

Section.	Miles per hour. From	To
Kotri-Badin	25 and 22	30
Sirhind-Rupar	22	26
Narowal-Amritsar	27 and 30	30
Lahore-Narowal	27 and 30	30
Batala-Qadian	30	35
Saharanpur-Delhi	30	35
Amritsar-Kasur	30 and 31	33
Lahore-Lala Musa	30	35
Nawashahr Doaba-Rahon . . .	18	22

These increases in speeds enabled the railway to provide in certain cases more suitable train connections to the public.

49.5. Punctuality.—The following table shows the percentage of passenger trains not losing time to the total number of trains run on all the Class I Railways during 1939-40 as compared with 1938-39 :—

—	All trains (including electric multiple unit trains).	Mail and important through trains.	Mixed trains.	Suburban trains.	Other pasenger trains.
Broad gauge.					
1938-39	80·9	72·2	77·8	78·9 94·3*	77·6
1939-40	**82·0**	**75·9**	**79·1**	**81·5** **92·2***	**79·2**
Metre gauge.					
1938-39	82·9	78·9	86·7	98·3 82·3†	80·0
1939-40	**84·9**	**79·4**	**87·7**	**98·5** **88·1†**	**82·2**

* Bombay, Baroda and Central India and Great Indian Peninsula Railways' electric multiple unit trains.

† South Indian Railway's electric multiple unit trains.

As compared with the previous year, the percentage of trains not losing time during 1939-40 shows an improvement under all the services both on the broad and metre gauges; the performance of the electric multiple unit suburban trains, however, shows a slight falling off on the broad gauge.

49.6. Employment of small power units.—Efforts to combat road motor traffic by the employment of small power units continued during the year under review.

Eleven third class diesel rail cars of the North Western Railway were put into service on the 15th May 1939, but were temporarily withdrawn for rectification of inherent defects after an aggregate mileage of 515,000 miles had been run. This represented the only new large scale experiment undertaken during 1939-40.

The sentinel coaches on the North Western, East Indian and Bombay, Baroda and Central India Railways continued in service but with demands for higher speeds and greater passenger accommodation these light units are becoming obsolete.

The six diesel rail cars on the Madras and Southern Mahratta Railway ran 309,871 miles during 1939-40 and the service was supplemented by light trains, as occasion demanded.

In order to reduce the running costs of their three motor coaches, the South Indian Railway converted them to diesel driven coaches and placed them in service on different sections where motor competition was keen. Light trains with two or three bogies were also run to augment these services and they became very popular with the travelling public.

50. Goods trains.

50.1. Reduction in transit time of goods.—*Assam Bengal Railway.*—The bulk of the goods traffic was carried by mixed trains. Yet one regular through goods train service was maintained between Tinsukia and Pandu mainly for the transit of oil and petrol, the average through speed of these trains being 17·6 and 16·5 miles per hour in the down and up directions, respectively.

The revised road van rules introduced during the year eliminated as far as possible delays to "smalls" at transhipment points. To ensure that traffic was not delayed *en route* periodical checks were made of transit time of consignments between different stations.

Special traffic such as tea, oranges, etc., was carried according to pre-arranged programme to avoid delays as far as possible.

Bengal and North-Western Railway.—The running of through goods trains between Gorakhpur and Katihar (312 miles) with double crews, started in November 1938, was continued during the year. These trains were worked by "YB" engines and hauled a load of 75 wagons.

Unreasonable delays in the transit of smalls were investigated and action taken to eliminate them.

Bengal Nagpur Railway.—During the year the timings of goods trains were improved wherever possible to ensure more economical working and expeditious movement of stock. The following long distance through goods services were maintained :—

		Scheduled time.	
	Miles.	Hours.	Minutes.
Express goods—			
Shalimar-Nagpur	701	51	32
Shalimar-Waltair	545	46	35
Through goods—			
Adra-Waltair	578	56	35
Talcher-Waltair	359	33	17
Gua-Burnpore	172	16	50
Bhojudih-Nagpur	612	57	0
Adra-Katni Murwara	546	56	34
Tumsar Road-Vizagapatam	467	43	43

The tranship service over the east coast section was overhauled resulting in a reduction of 24 hours in the journey time between Waltair and Khargpur. This not only expedited the supply and clearance of wagons at road side stations but also facilitated the delivery of long distance "smalls" one day earlier.

Bombay, Baroda and Central India Railway—Broad Gauge.—(i) The heavy war and famine traffic was handled by the improved turn round of stock secured by speeding up movement. The Bombay-Ahmedabad express goods service was continued and a reduction of 12 hours was made in the through services between Ujjain and Ahmedabad.

Metre gauge.—Through up goods trains were organised from Rewari to beyond Phulera.

During the busy season—December to March—the average number of goods trains run daily showed a considerable increase as compared with the previous year both on the broad and metre gauges :—

December to March.	Broad gauge.	Metre gauge.
1938-39	64	125
1939-40	**78**	**144**

The highest number of goods trains run on any one day was—

Broad gauge (2nd March)	95 trains.
Metre gauge (11th December)	163 trains.

(ii) Minor improvements were carried out to the scheme of clearing " smalls " by area vans attached to daily road van trains, accompanied by travelling clerks and hamals and the scheme was adopted permanently. This measure reduced the transit time of " smalls " by half both on the broad and metre gauges. The running of through vans between this railway and the Great Indian Peninsula, Madras and Southern Mahratta and Bengal Nagpur railways reduced considerably the handling work at Ujjain and Kotah. There was also an improvement in the average loading of vans and a reduction in the number run daily, the figures being :—

Broad gauge—

Average number of vans running daily—

1938-39	164
1939-40	**137**

	Against flow of empties.	Direction of flow of empties.
Average loads of vans (Maunds)—		
1938-39	88	76
1939-40	**109**	**89**

The elimination of transhipment from wagon to wagon reduced considerably the monthly average number of wagons employed on this work from 7,300 to 900 on the broad gauge and 6,600 to 3,170 on the metre gauge.

East Indian Railway.—(i) Through goods trains continued to operate on the main line sections to schedule timings.

On an examination of the movement of full wagon loads other than coal, it was found that the number of express goods trains serving heavy loading sections were not adequate. Duplicate express goods trains were therefore run on the following sections :—

	Miles.
(i) Ghaziabad to Moghal Sarai	471
(ii) Khanalampura to Moghal Sarai	520
(iii) Moghal Sarai to Howrah *viâ* Grand Chord	418
(iv) Asansol to Howrah	132
(Clearing perishables, livestock and other important traffic from the main line section Moghal Sarai to Asansol.)	

(ii) In addition, the following through goods train paths were set aside for the clearance of traffic requiring quick transit between section terminals, thus relieving detentions and handling at intermediate points :—

(*a*) Through Howrah loads *ex*-Moghal Sarai.

(*b*) Loop specials *ex*-Moghal Sarai for Sahibganj loop section.

(*c*) Through goods train *ex*-Sahibganj and Pakur on the Sahibganj loop section for Burdwan and below.

(*d*) A daily through goods train *ex*-Moghal Sarai clearing cement traffic *ex*-Sone-East-Bank and Dehri-on-Sone for Calcutta stations.

(iii) On the Gomoh-Gaya section the average load per train was raised from 60 in the last year to 66. On the Moradabad-Ghaziabad section the station facilities on the line were improved to accommodate a load of 70 wagons per train.

(iv) Van goods services also were run daily to scheduled timings on the following sections at an average over all speed of 240 miles per day—

(*a*) Howrah-Ghaziabad *viâ* the Howrah-Burdwan Chord and Grand Chord.

(*b*) Howrah-Mokameh Junction *viâ* main line and Sahibganj loop.

(*c*) Asansol-Khanalampura *viâ* main line and Fyzabad loop.

(v) The following measures were taken to reduce substantially the overall transit time of " smalls " :—

(*a*) Check on the movement of competitive traffic between selected pairs of stations (including foreign line stations) was extended from 90 to 130 pairs. Prompt action was taken to eliminate delays brought to light in the course of investigation.

(*b*) Action on delays to individual " smalls " consignments detected from station returns.

(*c*) Continuous check on loaded wagons detained in yards, delay in placement of vans in goods sheds and transhipment sheds and failure to despatch through vans and area vans by connecting through goods and " smalls " quick transit trains.

The acceleration of " smalls " traffic resulted in a further saving of approximately 90 wagons per day. A cent. per cent. check was exercised on the loading of all vans containing " smalls " by special staff employed in what is termed as Guidance check section. They brought to the notice of the staff responsible irregularities in loading, etc. The need for expeditious transit of goods and the methods adopted by the railway to attain this end were impressed upon the guards, assistant station masters and other staff by means of lectures at the Chandausi Training School.

Great Indian Peninsula Railway.—(i) A separate " Transit section " composed of an officer, 3 inspectors and 4 clerks was formed for investigating the question of transit of " smalls ". A detailed examination by this branch brought to light the following factors retarding quick transit :—

(*a*) irregular loading of vans by stations and guards;

(*b*) delay in initial despatch of goods from goods sheds;

(*c*) delay due to repacking at tranship sheds and transferring goods from one tranship shed to another; and

(*d*) tendency to move " smalls " from terminal to terminal and between guard changing stations entailing long halts.

(ii) These were remedied as far as possible by the following measures :—

(*a*) educating staff in the loading of through vans and tranship vans;

(*b*) scrutiny of vans made up by foreign railways and taking up delays at initial points of despatch;

(*c*) elimination of all unnecessary repacking by preparing through section road vans and booking them direct to the station serving the section (this resulted in the closing of repacking shed at Manmad);

(*d*) elimination of avoidable handling and detention to goods;

(*e*) relieving guards of the work of handling " smalls " and entrusting the same to tranship clerks (Raichur-Shahabad section); and

(*f*) revision of the timings of tranship trains to provide more convenient service.

Madras and Southern Mahratta Railway.—The tranship sheds at Gadag, Dharmavaram, Miraj, Raichur and Jalarpet were closed permanently. Card indexing of the transit time of goods between representative pairs of stations was continued during the year. An appreciable improvement was recorded in the transit time of goods to Madras. Similar statistics were maintained to watch the turn-round of oil and petrol tank wagons.

To avoid delay *en route* to loaded wagons marked sick for repacking axle boxes, these were run through to destination with a special green sick label. In case the destination station was not a train examining depôt, these wagons were unloaded first and then moved to the next train examining station in the direction of the flow of empties. From 31st December 1939 week-day unloading facilities were provided in goods sheds both on Sundays and public holidays.

Mysore State Railways.—One goods train each way was introduced between Bangalore City and Harihar, which enabled through loads to reach the destination in 24 hours. The goods train services between the branch and main lines were co-ordinated to avoid delay to loads at junctions and engine changing stations. Through road van services between this railway and the Madras and Southern Mahratta Railway were introduced on Bangalore City-Guntukal, Bangalore City-Dharmavaram and Bangalore City-Poona sections to eliminate unnecessary handling of road goods and " smalls " at junctions. Local through road vans were also introduced.

North-Western Railway.—The running of sectional vans was extended which resulted in the following transhipment sheds being closed either partially or in full :—

Tranship shed at	*Nature of closure.*
Jind	Full.
Narwana	Full.
Jakhal	Full.
Hyderabad	Full.
Kasur	Full.
Lahore	Main to main and branch to main—down direction.
Rawalpindi	Main to main (up and down).

The acceleration of trains, planning of goods train movements, increased use of through trains, closure of tranship sheds, alteration of train timings to give better branch line connections and elimination of unnecessary marshalling contributed to reduction in delivery times of " smalls ".

South Indian Railway.—The minimum maundage fixed for through road vans was reduced to 120 maunds on the metre gauge to facilitate the speedy transit of " smalls ". Certain defects in the working of the revised road van system were remedied to suit local conditions.

50.2. Loads.—The average net or freight load of goods trains (steam) on Class I Railways increased from 380 tons in 1938-39 to 383 in 1939-40 on the broad gauge and from 161 to 166 tons on the metre gauge. Statement No. 23 of Volume II of the report gives the figures for each railway.

The main index of goods train operation, *i.e.*, " Net ton miles per engine hour " showed improvement on both the broad and metre gauges of Class I Railways; the figures being :—

	Broad gauge.	Metre gauge.
1938-39	1,854	822
1939-40	**1,901**	**846**

These figures are dependent on the factors " tons carried ", " average lead " and " engine hours ".

Broad gauge.—As compared with 1938-39, the tons carried increased by 4,401,000 (4·9 per cent.) and the average lead rose from 208 to 210 miles (0·96 per cent.). The net ton miles increased by 1,101,607,000 (5·92 per cent.) but the engine hours increased only by 288,000 (3·19 per cent.).

Metre gauge.—The number of tons carried increased by 1,254,000 (5·24 per cent.), the average lead rose from 132 to 134 miles (1·51 per cent.). The net ton miles increased by 206,530,000 (6·53 per cent.) and engine hours rose only by 128,000 (3·87 per cent.).

51. **Marshalling and other yards and stations and their working.**—The following were some of the improvements made in yards and stations and in the methods of their working :—

Bengal and North-Western Railway.—At Sonepore goods lines were isolated from running lines and all points interlocked and controlled from two cabins, one at each end of the yard. At Savan and Muzaffarpur goods lines were isolated from running lines. Interlocking at the latter station is in progress.

Bengal Nagpur Railway.—In order to meet increased loading on the Barabil branch and to facilitate the placing of empties for loading, weighment, and adjustment of loaded wagons, the weighbridge and adjustment siding on the Barabil branch was extended by 700 feet and a second adjustment line to hold 46 wagons was provided. At Burnpore two more " exchange lines " to hold approximately 50 wagons each were provided to facilitate sorting of wagons—' covered ' and ' open ' separately.

East Indian Railway.—A pamphlet detailing the orders for the marshalling and grouping of wagons for all major yards has been prepared with a view to improving the working between contiguous divisions. The remodelling of the station yards at Aligarh, Hathras, Dehri-on-Sone, Hapur, Gomoh and Gaya has been completed. The remodelling of the station yards at Sahibganj, Lhaksar, Moradabad and Sitarampur is in progress.

Madras and Southern Mahratta Railway.—In December 1939, as an experiment, a change was made in the working of the Tondiarpet marshalling yard. The layout of this yard provides two humps and prior to the change all wagons passing from the north-east to the south-west lines and *vice versâ* had to be passed over both humps. By a change in the utilisation of the gathering lines below the humps, this has been rendered unnecessary with the result that the number of wagons humped has materially decreased. Besides avoiding delay to wagons, there is a reduction in shunting performed and also less risk of damage to wagons and their contents. The experiment is being continued.

52. **Wagon usage.**—The expeditious movement of wagons to their destination is a most important factor from the transportation point of view and this is watched on the basis of the statistical unit, the average number of miles run per wagon per day—both loaded and empty wagons being taken into account. The figures for Class I Railways are as follows :—

—	Class I Railways.			
	Broad gauge.		Metre gauge.	
	1938-39.	**1939-40.**	1938-39.	**1939-40.**
Wagon miles per wagon day . .	40·2	**41·3**	30·9	**32·9**

These figures indicate the work done by the total wagon stock of the railways including those standing empty and stabled during the period they are in excess of traffic requirements. The figures are therefore a record of performance not of the wagons actually in use but of the total wagon stock. There is still a further unit which indicates the efficiency of railways in

regard to wagon user, taking into consideration the revenue earning aspect of weight loaded in a wagon and the percentage of loaded to total wagon miles. This is the average number of net ton miles per wagon per day. The figures for Class I Railways are as follows :—

—	Class I Railways.			
	Broad gauge.		Metre gauge.	
	1938-39.	**1939-40.**	1938-39.	**1939-40.**
Net ton miles per wagon day . .	351	**367**	147	**158**

The improvement in results obtained under the two statistical units referred to above, both on the broad and metre gauges, reflect the effect of efforts made by railways to obtain the maximum possible use of the stock available.

53. Steps taken to improve the turn-round of wagons.—For many years the railways have been studying methods of obtaining a better usage of goods stock.

In December 1939, a special committee, known as the Wagon Turn-round Committee, was appointed under the Chairmanship of Mr. B. Moody, Chief Operating Superintendent, North Western Railway, to investigate the factors which controlled wagon usage on broad gauge railways individually and as a whole, and the report of this committee is being considered by the broad gauge railways.

Better use of goods stock has been obtained by special attention to improved marshalling, acceleration of trains, planning of train movements and the increased use of through trains. Certain railways introduced arrangements whereby goods were unloaded and wagons released on Sundays. Improvements were made to transhipment facilities, with considerable success. The repair of goods stock in sick lines on Sundays, the concentration of repacking of axle boxes at a number of key points, the reduction in the number of maintenance stations and the issue of special orders by which goods stock overdue repacking or damaged, but still fit to run could move more freely, have all contributed to a better usage of the available wagons.

The progress made on the Bombay, Baroda and Central India Railway in the elimination of transhipment from wagon to wagon, both on its broad gauge system and on its metre gauge system showed a very considerable saving in the number of wagons used.

The usage of metre gauge wagons also received special attention and in November 1939 a metre gauge wagon pool, under the control of the Director of Wagon Interchange, was introduced for the seventeen metre gauge railways, forming the Northern Group.

Certain railways introduced card indexing systems to ensure maximum use being made of special types of wagons.

The full results of the investigations of the Wagon Turn-round Committee will be more apparent in future years than they are at present.

53.1. Stock out of commission.—*Goods wagons.*—The average number of unserviceable broad gauge wagons in mechanical and transportation workshops and sick lines daily was 5·72 per cent. of the total goods stock on line as compared with the 4 per cent. in 1938-39. There has been considerable improvement in this figure since 1936-37, when it stood at 9·53 per cent. On the metre gauge, however, the figure deteriorated from 2·94 in 1938-39 to 3·60.

Passenger vehicles.—The average number of passenger vehicles under or awaiting repairs decreased on the broad gauge from 10·35 per cent. in 1938-39 to 9·85 per cent., but on the metre gauge, the figure increased from 6·95 in 1938-39 to 8·02 during the year under review.

54. Improved utilisation of rolling stock.—Administrations continued to report the steps taken to improve the utilisation of their rolling stock.

On the Eastern Bengal Railway a reorganisation of coaching stock resulted in 80 bogies and 5 four-wheelers being released and on the North Western Railway coaching and goods repair schedules were recast in order to facilitate outturn. At Bitragunta shed the Madras and Southern Mahratta Railway commenced a detailed study of locomotive power usage and re-organisation of links, and this is still in progress. On the Eastern Bengal Railway an amalgamation of the broad and metre gauge running sheds at Parbatipur with the object of co-ordinating repairs and assisting outturn was completed to the extent of 95 per cent.

The possibilities of further engine pooling were examined. Railways continued to experiment with the object of determining a more satisfactory type of journal bearing which will either eliminate or reduce heated bearings which affect the working of engines.

55. General operating results.—There was a general improvement in the operating efficiency of Class I Railways as is evidenced by the following statistical results :—

	1938-39.	1939-40.
Bengal Nagpur Railway—		
Engine miles per day per engine in use	130	**133**
Engine miles per day per engine on line	86	**92**
Lbs. of coal consumed per engine mile (shunting and siding)	66	**63**
Net load per train (goods) tons	393	**400**
Wagon miles per wagon day	40	**43**
Net ton miles per wagon day	391	**426**
Bombay, Baroda and Central India Railway—		
Broad gauge—		
Wagon miles per wagon day	47	**49**
Net ton miles per wagon day	409	**419**
Metre gauge—		
Wagon miles per wagon day	49	**59**
Net ton miles per wagon day	235	**278**
Eastern Bengal Railway—		
Metre gauge—		
Wagon miles per wagon day	27	**28**
Net ton miles per wagon day	107	**117**
Gross tons per goods train	478	**482**
East Indian Railway—		
Net ton miles per wagon day	359	**372**
Net ton miles per engine hour	1,967	**1,990**
Net ton miles per goods locomotive day in use on goods service	25,018	**25,446**
Wagon miles per shunting engine hour	691	**724**
Gross ton miles per engine hour	4,674	**4,792**
Great Indian Peninsula Railway—		
Net ton miles per wagon day	468	**473**
Train miles per engine day—		
Goods	107	**112**
Passenger	184	**193**

	1938-39.	1939-40.
South Indian Railway—		
Wagon miles per wagon day—		
Broad gauge	37	**41**
Metre gauge	28	**30**
Net ton miles per wagon day—		
Broad gauge	302	**326**
Metre gauge	120	**128**
Net ton miles per engine hour—		
(i) excluding departmental—		
Broad gauge	1,525	**1,553**
Metre gauge	903	**945**
(ii) including departmental—		
Broad gauge	1,293	**1,322**
Metre gauge	749	**796**

56. Wagon Position.

56.1. Broad gauge wagon pool.—The number of public service wagons (in terms of four-wheelers) in use at the end of the year was 151,909, *i.e.*, 2,348 more than at the end of 1938-39.

The total number of wagons loaded was 4,933,799, being an increase of 151,671 wagons or 3·17 per cent. over the previous year.

Practically all available wagons continued to be in demand until the end of May 1939. From 11th September 1939 demands for wagons again commenced and during the months of January, February and March exceeded the available supply. The highest loading was registered in period ending 29th February 1940 when an average of 17,339 were loaded daily. This figure establishes a new record and surpasses the previous highest record of 15,222 registered during the period ending 28th February 1938.

The number of wagons temporarily out of service on all broad gauge railways from December 1939 to March 1940, the busy months, varied between 7,335 and 7,827, the lowest figure being 4·83 per cent. of the total stock available for public traffic.

56.2. Metre gauge wagon pool.—As a war measure, the 17 metre gauge Railways in Northern India, formed a wagon pool which commenced to operate from 15th November 1939. This measure was designed to effect closer control and to ensure the best possible use being made of metre gauge stock.

57. Neutral examination of interchanged stock.—*Broad gauge.*—The staff working under the Director of Wagon Interchange continued to examine wagons interchanged between railways at the following junctions :—

Agra Cantonment.
Ajni-Nagpur.
Chheoki.
Ghaziabad.
Khanalampura.
New Delhi.
Waltair.

B.—Commercial.

58. Alterations in rates and fares.—With a view to meeting in full the contribution of the railway revenue to general revenues during the period of the war and, if possible, to earn a surplus to be utilized towards rebuilding the depleted reserve fund after meeting the increased working expenditure due to rise in price of stores, etc., the following " increased charges " to be levied on the total fare and freights were introduced with effect from 1st March 1940 :—

Traffic.	*Increased charge.*
1. Passenger	One anna per rupee.
2. Other coaching traffic	Two annas per rupee.
3. Goods other than coal, coke and patent fuel	Two annas per rupee.

The increased charge is not leviable on the following :—

(i) single journey fares of Re. 1 and under and children's half tickets of annas 8 and under;

(ii) return journey fares where the corresponding single journey adult fare is Re. 1 or less;

(iii) season ticket fares of any class where the corresponding single journey adult fare is Re. 1 or under;

(iv) military traffic to which military traffic rules and rates apply, except traffic carried at concession rates scheduled in Appendix B of Military Tariff;

(v) postal traffic;

(vi) railway materials and stores;

(vii) food grains;

(viii) grass, dry (includes bankas grass, bhoosa, dhall stalks, fodder, hay, kirby, moonj, sirkee and straw), grass green and fodder;

(ix) manures; and

(x) newspapers and news-print.

During the month of March 1940, the surcharge of 12½ per cent. (subject to a maximum of Re. 1 per ton) levied on coal freights, was replaced by an " increase in freight " of 15 per cent. without any maximum limit.

The other important alterations in rates and fares, made during the year, are given in the following paragraphs :—

58.1. Passenger fares.—The bases of passenger fares generally remained unchanged. The following are, however, some of the more important changes in fares made during the year either to meet road competition or to develop new traffic :—

(i) *Assam Bengal Railway.*—(*a*) With effect from 1st July 1939, third class passenger fares were reduced from 3 to 2 pies per passenger per mile over the Furkating-Badulipar-Jorhat branch, and from 3 to 2½ pies per passenger per mile over the Simaluguri-Khowang branch.

(*b*) Third class round-tour tickets were introduced with effect from 1st April 1939, from Tinsukia, Jorhat Town, Sibsagar Town, Nowgong-Assam, Gauhati and Manipur Road to certain stations on foreign railways.

(ii) *Bengal Nagpur Railway.*—Circular tour tickets at reduced fares, covering total distances varying from 3,684 miles to 4,939 miles, over practically the whole of India, by different routes, were introduced with effect from April 1939.

(iii) *East Indian Railway.*—With effect from 1st April 1939, through 60-day return tickets of all classes, at 1½ single journey fares were introduced from 20 selected stations on the East Indian Railway to Dalhousie, Simla, Summer Hill and Solon.

(iv) *Great Indian Peninsula Railway.*—(*a*) Six-monthly rail-cum-road return journey tickets of all classes were issued at concession fares during the period 1st April to 30th November 1939 from Bombay, Poona, Bhopal, Gwalior, Agra Cantonment, Muttra, Nagpur, Jubbulpore, Jhansi and Nasik Road to Srinagar and back, in conjunction with the North Western Railway out-agency motor services.

(*b*) Return tickets for all classes were issued from 17th February to 21st March 1940, at 1⅓ single journey fares, from all stations on the Great Indian Peninsula Railway (excluding feeder lines) and *viâ*, to Ramgarh

Town (Bengal Nagpur Railway) and Ranchi Road (East Indian Railway), in connection with the session of the Indian National Congress held at Ramgarh.

(*c*) Cheap return tickets of different classes at $1\frac{2}{3}$ and $1\frac{1}{2}$ single journey fares, according as the distances are less or more than 500 miles, were introduced between certain selected stations over the Great Indian Peninsula Railway.

(*d*) From 10th August to 7th September 1939 cheap third class return tickets were issued from certain stations and city booking offices over the Great Indian Peninsula Railway to Muttra and back in connection with the Hindola and Janamashtami fairs at Muttra.

(v) *Madras and Southern Mahratta Railway.*—With effect from 15th December 1939 the basis of cheap third class fares on the Katpadi-Pakala-Dharmavaram-Anantapur section were enhanced to 3 pies per mile in view of the imposition of the Provincial Petrol Sales Tax and rise in the price of motor accessories due to war.

(vi) *His Exalted Highness the Nizam's State Railway.*—In connection with the Ashadi and Kartika fairs held at Pandharpur in June and November 1939, third class rail-cum-bus return tickets at $1\frac{1}{2}$ fares for the double journey over the railway portion, were issued from certain stations on His Exalted Highness the Nizam's State Railway to Pandharpur.

(vii) *North Western Railway.*—Single or return tickets at cheap fares were introduced on 60 additional sections of the North Western Railway in competition with road motor services. On 19 sections where the results were not satisfactory the cheap fares were withdrawn. There are now 175 sections over which such fares are in force.

(viii) *South Indian Railway.*—(*a*) During the period from 1st April to 30th September 1939, first, second and third class return tickets were issued at $1\frac{1}{2}$ single journey fares, between certain stations on the South Indian Railway situated at a distance of over 100 miles, with a view to developing traffic.

(*b*) In connection with the annual session of the Indian National Congress held at Ramgarh in March 1940, first, second and third class return tickets were issued from all stations on the South Indian Railway (Shoranur-Nilambur Railway excepted) to Ramgarh Town (Bengal Nagpur Railway) and Ranchi Road (East Indian Railway), at the following fares :—

First and second class	At $1\frac{1}{2}$ single journey fares.
Third class	At $1\frac{3}{4}$ single journey fares.

58.2. Parcels traffic.—(i) *Assam Bengal Railway.*—Quarter parcels rates for oranges were introduced in December 1939 and January 1940, between certain stations on the Assam Bengal Railway.

(ii) *Madras and Southern Mahratta Railway.*—There was a bumper mango crop in the Chittoor and the North Arcot districts and also in the Northern Circars, and special wagon rates by passenger train were quoted from several stations to stations in Central and Northern India. About five lakh maunds of mangoes were moved at these rates, yielding a total revenue of over Rs. 7 lakhs.

(iii) *North Western Railway.*—(*a*) Reduced rates ranging down to $\frac{1}{8}$th parcels rates continued to be charged for fresh fruits and vegetables over several sections with the object of diverting traffic from road to the railway. During the year such reduced rates were introduced over 270 sections, and were withdrawn from 29 sections where the results were unsatisfactory.

(*b*) To recapture pomegranate traffic which had been diverted to road to a considerable extent, $\frac{1}{3}$rd parcels rate was introduced from Peshawar to Howrah.

58.3. Goods traffic.—(i) *Assam Bengal Railway.*—With effect from 1st February 1940, the basis of rates for marble and stone, in local booking, was enhanced from 0·10 pies per maund per mile *plus* a terminal charge of 3 pies per maund, to :—

	Pie per maund per mile.
1—150 miles	0·14
+151 miles and over	0·11

plus a terminal of 6 pies per maund.

(ii) *Bombay, Baroda and Central India Railway.*—As a result of the rise in prices of motor accessories and other imported goods due to the war it has been possible to withdraw certain concessional rates or to make small increase in some of the others quoted in competition with rival transport services. A few of such enhancements made during the year are shown below :—

Commodity.	Approximate amount of enhancement.
	Per cent.
Cotton (raw), full-pressed	10
Rice	15
Wheat	10
Certain other commodities such as iron and steel, machinery, etc.	25

(iii) *Bengal and North-Western Railway.*—With effect from 1st November 1939 the C/D schedule rate (0·25 pie per maund per mile) chargeable for grain and pulses was replaced by C/Q schedule rate, *viz.*:—

	Pie per maund per mile.
1—75 miles	0·30
+76—400 miles	0·17
+401 miles and over	0·10

(iv) *East Indian Railway.*—(*a*) With effect from 1st December 1939 limestone when booked to sugar factories for sugar refining purposes, is being charged at a reduced scale of rates, *viz.*, the C/O schedule rate shown below :—

	Pie per maund per mile.
1—100 miles	0·20
+101—200 miles	0·17
+201—500 miles	0·14
+501 miles and over	0·10

(*b*) The haulage charge of Rs. 2-8 per four-wheeled wagon between *viâ* Tikiapara and depôts in Howrah area, for traffic from and to Bengal Nagpur Railway stations and sidings, has been raised to Rs. 5 per four-wheeled wagon with effect from 1st May 1939.

(v) *Great Indian Peninsula Railway.*—With effect from 15th November 1939 rates varying from 8 to 30 per cent. below the normal rates, were quoted for cotton seeds, in wagon loads, from the principal cotton seed booking stations on the Great Indian Peninsula Railway to the following stations :—

(*a*) *Viâ* New Delhi for traffic to North Western Railway stations, Shahdara (Delhi)-Saharanpur Light Railway stations, and Gurgaon, Farukhnagar, Rewari, Dalmiya-Dadri, Bhiwani, Hissar, Hansi, Narnaul and Kosli stations on the Bombay, Baroda and Central India Railway.

(*b*) New Delhi, Bombay, Agra stations and Morena.

(*c*) *Viâ* Amalner for traffic to Navsari.

(vi) *Jodhpur Railway.*—With effect from 1st January 1940 the special rates for cotton (raw) full-pressed, cotton seeds, and wheat, quoted from stations in Sind to certain stations on the Bombay, Baroda and Central India Railway, in competition with the rail-cum-sea route *viâ* Karachi were enhanced by 10 per cent. consequent on the rise in sea freights due to war.

(vii) *Madras and Southern Mahratta Railway.*—Advantage was taken of the price appreciation of metallic ores due to the war to make an enhancement of Re. 1 per ton in all the special rates quoted for manganese and chrome ore.

(viii) *North Western Railway.*—(*a*) Special reduced rates for grass dry in wagon loads intended for the manufacture of paper, cardboard and strawboard, were quoted from certain stations on the North Western Railway to Saharanpur and Jagadhri.

(*b*) In accordance with the recommendations of the Railway Rates Advisory Committee, the rate of Rs. 1-7-1 per maund for hides, skins or pelts, common, dry, from stations in the Delhi area to Karachi, was reduced to Rs. 1-1-4 per maund and the weight condition raised from W/300 to W/400.

(*c*) In order to enable traffic in vegetable ghee and vegetable oil solidified to move by the all rail route, a number of special rates were quoted from Bombay, Begamabad, Lyallpur, Delhi Kishanganj, Subzimandi and New Delhi to certain stations on the North Western Railway.

59. Adjustments in rates and fares to counteract the adverse effects of the increased charges.—As the "increased charges" were introduced with effect from 1st March 1940, the majority of the adjustments in rates and fares made by the railways took effect after the close of the year under report. A few examples of the adjustments made are quoted below :—

(i) *Assam Bengal Railway.*—Rates for bamboo mats, old newspapers, cement, timber, soda ash and caustic soda from and to certain stations where the traffic is affected by boat competition, were adjusted in conjunction with the steamer companies. A number of rates for bamboos in local booking were also adjusted.

Again certain rates quoted in agreement with the Assam Oil Company, *viz.*, those pertaining to malariol, bitumen, kerosene and petrol to Budge Budge and Narculdanga; jute batching oil to certain mills and presses on the Eastern Bengal Railway; solvent oil to Calcutta and Batanagar and wax to Chittagong Port, were adjusted to neutralise the "increased charge".

(ii) *Jodhpur Railway.*—The following rates were adjusted :—

(*a*) all special rates in local booking quoted in competition with road transport;

(*b*) haulage charges for water as also certain station-to-station rates for water in local booking; and

(*c*) station-to-station rates for live stock from Tilwara fair to certain stations on the Bikaner State Railway quoted to encourage movement of live stock by rail.

60. Simplification of tariffs and measures adopted to expedite quotation on rates.—This subject continued to receive the attention of the Indian Railway Conference Association and of the individual railways. The following details are indicative of the measures taken to simplify work for the staff and to expedite quotation of rates :—

Assam Bengal Railway.—The issue of foreign outward rate registers to all stations and sidings open for through booking was completed. The preparation of local outward rate registers was taken in hand.

Bengal Nagpur Railway.—The preparation of station rate registers for foreign outward traffic is nearing completion.

Bengal and North-Western Railway.—A special ' sugar pamphlet ' showing rates for sugar from all factory stations on the Bengal and North-Western Railway to important sugar markets in India was issued.

Rate note books were introduced.

Eastern Bengal Railway.—Several inoperative rates were cancelled and omnibus and vague entries were eliminated from the tariffs.

East Indian Railway.—To facilitate calculation of siding charges, quoted on a decimal basis, a ready reckoner for such charges with a set of simple rules was issued and incorporated in the tariff.

Jodhpur Railway.—Inoperative rates were cancelled. Steps were taken to ensure correct maintenance of rate note books at stations.

Madras and Southern Mahratta Railway.—Rate note books were introduced at all stations.

North Western Railway.—To expedite quotation of rates to the public, the strength of the rates quotation office was suitably increased.

61. Facilities for dealing with traffic.—Railways continued their policy of opening new booking offices and out-agencies with a view to affording additional facilities. The particulars of booking offices and out-agencies opened during the year by the principal railways are given in paragraph 111. The following are some of the other important facilities provided during the year :—

Bombay, Baroda and Central India Railway.—Five " halts " were converted into regular flag stations.

Bengal Nagpur Railway.—Goods stacking platforms have been provided at Ballichuck, Haldipada and Kesinga. A shed has been constructed at Amgaon for stacking goods and another at Santragachi for storing " smalls ".

A cement " channel " platform has been provided at Panposh.

East Indian Railway.—Four new assisted and private sidings were opened to serve mills and other business concerns. A goods collection and delivery office has been opened at Aloopasta, Calcutta, for the outward despatch and inward receipt of potatoes, onion and garlic as an experimental measure for six months.

Madras and Southern Mahratta Railway.—A number of private, assisted and railway sidings were opened.

North Western Railway.—Arrangements were made for the collection of goods from merchants' premises at Sargodha.

Arrangements were also made for the collection and delivery of :—

(i) resin from Kahuta and Chirah to Jallo *viâ* Sihala and Rawalpindi railway stations;

(ii) resin from eleven forest depôts in the Kangra Valley to Jallo;

(iii) the Punjab Government dâk from the Secretariat in Lahore to Ellerslie, Simla and *vice versâ;* and

(iv) the Government of India dâk from the offices in New Delhi to the Secretariat offices in Simla and *vice versâ.*

South Indian Railway.—Arrangement was made for effecting street delivery of parcels at Ernakulam, Palghat, Trichur, Mangalore, Madura Junction, Coonoor, Vellore Cantonment and Town.

62. Road motor competition.—The railways continued to make every effort to combat competition with them by road vehicles. Brief particulars of the measures taken by them in this respect are given below :—

Assam Bengal Railway.—As an experimental measure, third class fares were reduced from 3 to 2 pies per mile on the Furkating-Badulipar-Jorhat branch and from 3 to 2½ pies on the Simaluguri-Khowang branch with effect from 1st July 1939. There are definite indications that at least on the first named branch passengers are already being gradually diverted from road transport to the railway.

Bengal and North-Western Railway.—Reduced third class return tickets were introduced for Allahabad, Ajodhya and Bahraich during mela times.

Bengal Nagpur Railway.—The position in regard to competition for passenger traffic remained more or less as in the previous year. It was met with varying degrees of success by reduced fares, additional train services and provision of passenger halts. 23 passenger halts were opened on the Nainpur District, 3 on the Adra District, 4 on the Khurda District and 1 on the Titilagarh Sub-district.

East Indian Railway.—Motor transport has been affected by rising costs of operations and other difficulties as a result of the war. In many cases road motors have not been able to maintain their charges at pre-war levels. This combined with the effects of counter-measures taken by the railway has led to diminished competition in several cases. To counteract road competition return journey tickets at reduced fares between 53 additional pairs of stations were introduced during the year.

Great Indian Peninsula Railway.—The following measures among others were adopted to combat road competition for passengers, parcels and goods traffic :—

(i) reduced rates and fares were quoted between several pairs of stations for goods, parcels and passengers;

(ii) shuttle services between the Murtazapur and Karanja was extended to Yeotmal;

(iii) halt stations were opened at certain places; and

(iv) the timings of trains were altered to suit local requirements.

Jodhpur Railway.—3rd class single journey fares between Hyderabad (Sind) and stations Naoabad to Khadro and between Nawabshah and stations, Khan (Sind) to Shahpurchakar were reduced to compete with road motor services.

Mysore Railway.—The system of stopping trains at wayside halts was extended to Bangalore City-Hindupur section of the railway and adjustments were made in rates from time to time to hold goods traffic to the railway.

Madras and Southern Mahratta Railway.—Concessions were introduced between 1,042 points in connection with some 70 festivals. A number of reduced rates were introduced for transport of fruits and vegetables by passenger trains. About 2,000 special rates were quoted for goods traffic to meet competition by road, sea and canal and to develop traffic generally. Halts were opened at five more places.

North Western Railway.—Road services continued to compete for the railway's goods and coaching traffic. The rise in the prices of petrol, lubricating oil, spare parts and lorries since the outbreak of hostilities in September 1939, however, checked to a large extent further reduction in the rates by these rival transport agencies.

Rohilkund and Kumaon Railway.—The following measures were adopted to deal with the problem :—

(*a*) issue of intermediate and third class return tickets at concession fares over the main line Lucknow to Kasganj including Bareilly-Kathgodam section;

(b) issue of first and second class 15-day return tickets between Bareilly and Kathgodam;

(c) issue of third class return tickets from certain stations on the Bombay, Baroda and Central India Railway to Soron *viâ* Kasganj; and

(d) introduction of $\frac{1}{3}$rd parcel rate on the through distance for booking fresh fruits and vegetables from Haldwani, Kathgodam and *viâ* Kathgodam to certain stations on this railway and on the Bengal and North-Western, Bombay, Baroda and Central India and East Indian railways.

South Indian Railway.—There was a diminution in rate cutting and an increase in bus fares on almost all competitive sections owing to rise in the cost of petrol and motor accessories and the bus owners forming themselves into combines. The railway successfully negotiated with reliable bus organisations for cancellation of reduced fares on competitive sections.

Improved facilities for rail travel were provided by the adjustment of train timings, provision of additional halts, opening of city booking offices and temporary booking offices at festival centres. Special efforts were also made to encourage co-ordination of road and rail services by opening out-agencies in important rural business centres.

63. Through road and rail services.—The railways continued their policy of providing through booking facilities by opening new out-agencies. The particulars of out-agencies opened by the principal railways during the year are given in paragraph 111.

64. Contact with business community.—Railways continued to maintain close touch with the business community. The important channels usually employed to maintain contact with them are the Local Advisory Committees of the various railways, consisting of members representing industry, commerce and trade, drawn from important Chambers of Commerce, Trade Associations, etc., representatives of the Central Legislature (members of the Central Advisory Council for Railways), and of the provincial legislatures. For a fuller account of the work done by those committees, paragraph 11 may be seen. Arrangements also exist at Bombay and Calcutta for closer contact meetings between important railways serving the ports, on the one hand, and commercial and trade interests, on the other. These meetings have been very useful in enabling railways to ascertain directly the requirements of the commercial community in the matter of various railway facilities and reconciling differences of views in certain matters. In many instances, a railway representative is an *ex-officio* member of the committees of important Chambers of Commerce. Apart from the arrangements made by the headquarters offices of railway administrations to keep in touch with trade interests, railways take special steps to see that their local district and divisional officials keep in regular touch with the local requirements of customers.

An indication of some of the steps taken by certain railways is given below :—

Bengal Nagpur, Eastern Bengal and East Indian railways.—During the three quarterly meetings with representatives of five Chambers of Commerce in Calcutta and the Calcutta Trade Association a wide variety of subjects was discussed including such questions as :—

(a) reductions in freight,

(b) changes in the classifications of the commodities,

(c) risk notes,

(d) wagon supplies,

(e) facilities for passenger and goods traffic,

(*f*) prevention of claims,

(*g*) prevention of detention of stock during industrial strike, and

(*h*) facilities for tourist agents.

Assam Bengal Railway.—On the suggestion of the local Chambers of Commerce and the Trades Association, represented on the Closer Contact Committee meetings at Calcutta, the administration agreed to send their representative to any meeting when the agenda included subjects concerning the Assam Bengal Railway.

East Indian Railway.—The Chief Commercial Manager held a meeting with the Cawnpore Chamber of Commerce.

Great Indian Peninsula Railway.—Meetings with merchants and their agents were held at regular intervals by the Divisional Traffic Managers at important stations when the merchants were advised of changes in rates and fares and other facilities of interest.

Madras and Southern Mahratta Railway.—Close contact was maintained with the Marketing Officers in the Madras and Bombay Presidencies. Local contact with the business community was maintained through Assistant Commercial Officers posted at Madras, Hubli and Bezwada and the canvassing staff working under them.

North Western Railway.—Contact with the local representatives of the trade and commercial branch of the railway was maintained as usual through meetings held at regular intervals at all important stations on this railway. Timely notices regarding the dates and times of such meetings were sent invariably to the various representatives of the trading bodies. A representative of the administration was on the committee of the important Chambers of Commerce at Lahore, New Delhi, Karachi and Amritsar.

South Indian Railway.—The Chief Commercial Superintendent and the District Commercial Officers were *ex-officio* members of various Chambers of Commerce. These arrangements enabled the railway to keep in close touch with trade interests and maintain friendly relations with them. The canvassing staff of the Commercial Department also kept close contact with the traders.

65. Refund on unused tickets.—The railways continued their endeavour to ensure more expeditious disposal of claims for refund on unused or partially used tickets. Mention may be made of the steps taken in this regard by a few of the railways :—

Bengal and North-Western Railway.—A new form has been introduced to ensure more expeditious disposal of such claims.

Eastern Bengal Railway.—As an experimental measure, arrangements have been made to allow refund of overcharges on local traffic up to Rs. 10 prior to certification by the accounts office.

North Western Railway.—Arrangements have been made to allow refunds on local goods and coaching transactions not exceeding Rs. 10 before auditing of the claims by the accounts office. This system has been extended to urgent cases of unused tickets irrespective of the amounts involved.

66. Claims for compensation and refunds.—The following statements for Class I Railways (except Jodhpur and Mysore) show for 1939-40 :—

A. *the number of claims in respect to goods or parcels damaged or lost received and for goods and parcels overcharged and the average time taken in their settlement;*

B. *the number and value of claims paid in respect of goods or parcels lost or damaged under main causes;*

C. *the number of court cases in respect of goods or parcels lost, damaged or delayed and their disposal.*

STATEMENT A.

Item No.	Particulars.	A. B.	B. & N.-W.	B. N.	B., B. & C. I.	E. B.	E. I.	G. I. P.	M. & S. M.	N. S.	N. W.	R. & K.	S. I.
1	Number of cases involving compensation for goods or parcels lost, damaged, or delayed carried over as unsettled at the close of the preceding year .	141	278	772	727	859	1,624	305	322	119	777	84	206
2	Number of claims received (and re-opened) for compensation on account of goods or parcels lost, damaged, or delayed during the current year . .	1,485	2,733	5,249	8,316	6,539	9,784	6,721	4,369	746	9,935	663	2,794
3	Number of claims referred to in items 1 and 2 settled during the year . . .	1,473	2,563	4,922	8,058	5,911	9,726	6,600	4,332	706	9,527	607	2,728
4	Balance outstanding as unsettled at the close of the year . .	153	448	1,099	985	1,487	1,682	426	359	159	1,185	140	272
5	Net amount paid in compensation . Rs.	8,463	23,347	48,132	25,480	59,085	50,503	51,826	39,868	3,839	67,817	3,319	17,526
6	Percentage sum paid in compensation (item 5) bore to gross earnings .	0·07	0·13	0·04	0·03	0·15	0·03	0·05	0·05	0·02	0·04	0·07	0·03
7	Average time in days taken in settlement of claims shown under items 1 and 2 . .	30	67	71	20	50	71	13	31	56	26	58	29
8	Number of applications received for refunds on goods and parcels overcharged . .	3,793	4,539	4,315	11,407	9,003	15,024	5,699	4,849	2,061	13,010	604	8,911
9	Average time taken in settlement of claims shown under item 8. Days	28	64	50	27	51	58	49	19	61	22	49	20

STATEMENT B.

Item No.	Particulars.		A. B.	B. & N.-W.*	B. N.	B., B. & C. I.	E. B.	E. I.	G. I. P.	M. & S. M.	N. S.	N. W.	R. & K.	S. I.
1	Claims paid on account of goods lost.	No.	93	704	1,730	2,227	741	3,501	1,525	198	172	188	158	818
		Value Rs.	1,999	9,311	29,888	12,608	11,654	62,659	13,141	4,635	1,344	2,948	1,261	7,539
2	Claims paid on account of goods stolen.	No.	235	136	20	331	43	1,030	978	137	26	1,209	12	24
		Value Rs.	4,626	6,170	1,060	6,444	1,853	16,994	11,764	3,681	214	13,860	2,272	745
3	Claims paid on account of goods damaged by wet.	No.	34	35	403	800	539	1,735	2,118	388	125	691	2	173
		Value Rs.	849	1,174	9,605	4,964	18,085	21,203	14,748	4,131	930	9,601	17	3,296
4	Claims paid on account of goods damaged by fire.	No.	..	..	6	7	..	5	8	..	1	7	..	9
		Value Rs.	..	..	834	2,148	..	1,199	2,055	..	415	1,023	..	1,042
5	Claims paid on account of goods damaged by breakage.	No.	32	12	59	54	7	69	188	78	33	44	7	68
		Value Rs.	1,178	345	1,253	1,336	95	6,627	5,422	1,095	185	1,484	64	557
6	Claims paid on account of parcels and luggage lost and stolen.	No.	69	80	189	100	352	732	163	61	21	64	21	111
		Value Rs.	1,120	1,398	3,558	489	3,957	23,295	2,405	954	205	753	100	658
7	Claims paid on account of other causes.	No.	45	340	355	1,291	1,033	453	895	1,584	328	2,179	24	216
		Value Rs.	1,105	9,995	12,945	16,751	20,188	14,318	23,143	32,850	546	29,207	737	3,694

* Miscellaneous recoveries amounting to Rs. 5,046 have not been deducted from the value figures.

STATEMENT C.

Item No.	Particulars.	A. B.	B. & N.-W.	B. N.	B., B. & C. I.	E. B.	E. I.	G. I. P.	M. & S. M.	N. S.	N. W.	R. & K.	S. I.
1	Number of suits filed in court (or pending from the previous year) for the recovery of compensation in respect to goods or parcels lost, damaged or delayed .	12	61	59	55	34	124	120	69	6	62	10	38
2	Number of such suits settled out of court .	3	9	8	9	2	11	13	3	1	7	2	1
3	Number of suits dismissed . . .	2	27	3	20	16	13	40	38	2	22	3	17
4	Number of suits decreed	2	8	1	4	8	30	15	..	..	6	3	5
5	Number of suits pending	5	17	47	22	8	70	52	28	3	27	2	15

67. System of ticket checking and prevention of ticketless travel.—The railways continued to give unremitting attention to the problem of ticketless travel. The methods adopted with a view to ensuring the minimum loss of revenue on this account have been given in considerable detail in previous reports. In the year under review, 2,354,002 passengers were detected travelling without tickets as compared with 2,461,612 in the year 1938-39. A considerable loss of revenue occurs on account of ticketless travel, and this reacts adversely on the ability of the railways to provide additional amenities for those passengers who pay.

2. The methods generally adopted by the various railways to detect and prevent ticketless travel are in the main similar to those in force in previous years, the principal measures being a combination of ticket collectors and checkers at stations and travelling ticket examiners making surprise checks on trains. Despite the heavy expenditure incurred by railways in the application of these methods, the problem continues to remain a very serious one as may be seen from the figures given in the statement at the end of this paragraph.

A brief mention is made of some of the measures and changes of organisation adopted by the railways during the course of the year.

Assam Bengal Railway.—Special checks at stations were discontinued during the year under review as it was considered that the travelling ticket examiners could be more usefully employed in checking trains. The arrangements of the Government whereby special magistrates held courts periodically at different stations continued throughout the year, and although there was an improvement in the work of the courts, only a very small proportion of the cases tried resulted in the railway dues being recovered. In the vast majority of cases the courts reported that no trace could be found of the defaulters concerned. The railway administration, in conjunction with the civil authorities, is pursuing this question with a view to trying to reduce the number of " non-traceable " cases. Negotiations took place during the year with a view to extending the system of holding summary trials at certain stations in the Mymensingh and Dacca civil districts and the necessary arrangements were brought into force in April 1940.

Apart from the normal programme checks, circle inspectors organised additional surprise checks on trains which were not included in the schedules issued to travelling ticket examiners.

Bengal Nagpur Railway.—Special checks were carried out by District Commercial Officers and District Transportation Officers and the staff under them, who were occasionally spared from their normal duties and these checks yielded an additional revenue of Rs. 3,079.

Eastern Bengal Railway.—The block system which was introduced in June 1938, was given up after November 1939 for, although under this system an appreciable increase was first noticed in the sale of tickets, it was found later that the increase was mostly on account of short journey tickets. It appeared that people were purchasing tickets to stations just beyond the block and, in consequence, there was a deterioration in the earnings for stations outside the limits of the block.

When the block system was withdrawn the control of the ticket collecting staff in the block area was temporarily transferred to the Superintendent, Watch and Ward and subsequently retransferred to the District Traffic Superintendent, Calcutta. The Sealdah station ticket collecting staff was strengthened by the appointment of additional staff. In addition to the regular measures adopted, various special measures such as surprise checks of collected tickets and special intensive checks jointly by the Accounts and Traffic Departments were adopted.

The special branch of the Checking Department brought to light several cases of fraudulent or irregular travel by vendors and other seasonal concession ticket-holders. Many of these cases were sent up for trial and most of them ended successfully in conviction. Special checks were also carried out to guard against the re-sale and re-use of tickets.

Madras and Southern Mahratta Railway.—The Court of the Special Honorary Magistrate at Madras was continued and 1,571 cases were placed before the magistrate, convictions being secured in 1,544 cases. Arising from the satisfactory results of the special court at Madras, the Bombay Government sanctioned the constitution of a special court at Hubli to try railway cases. Since the incorporation of this court, 214 cases have been tried and convictions secured in 211 cases. It is satisfactory to note that although the number of cases taken to courts in the year under review was higher than in the previous year, the number of cases that proved infructuous was less.

His Exalted Highness the Nizam's State Railway.—The new feature during the year was the formation of railway-cum-road ticket checking squads from the 1st of August 1939. Three squads consisting of two men each were formed from specially selected travelling ticket inspectors, and each squad was provided with a motor bicycle. These squads checked both trains and buses of the Road Transport Department, and experience has shown that this measure has improved the efficiency of ticket checking on trains by providing a surprise check on the work of the departmental Travelling Ticket Inspectors. A further measure adopted was the appointment of a specially selected senior Travelling Ticket Inspector to check the earnings from the sale of platform tickets at important traffic stations and also to investigate other sources of leakage in earnings.

North Western Railway.—The cent. per cent. check on passenger trains in the Karachi Division, the details of which appeared in the report for the year 1938-39, was discontinued as it was found to be uneconomical. The strength of the special headquarters organisation was increased by two more groups. Previously there was only one headquarter section consisting of 8 men under an Inspector. Three headquarters sections have now been organised into squads of 7 Special Ticket Examiners, each under one Group-in-Charge. These squads are under the control of an Inspector, and they continue to function efficiently conducting super-checks on the work of the divisional organisation.

Intensive checks of passengers at selected stations were also undertaken jointly by a senior Travelling Inspector of Accounts and his assistants and headquarters and divisional organisation Special Ticket Examiners.

South Indian Railway.—Provision was made for a daily check of all important trains throughout the run, other trains being manned alternately. Where it was not possible to check trains regularly, periodical and surprise checks were made by special squads of Travelling Ticket Examiners. Special checks were arranged at the time of fairs and festivals.

The following statement shows the total number of passengers, excluding mendicants, detected travelling without proper tickets on Class I Railways during the year 1939-40 :—

Railway.	No. of passengers.
Assam Bengal	56,547
Bengal Nagpur	188,070
Bengal and North-Western	348,517
Bombay, Baroda and Central India	293,394
Eastern Bengal	255,639
East Indian	238,011
Great Indian Peninsula	212,125
Jodhpur	17,769
Madras and Southern Mahratta	141,023
Mysore State	14,225
His Exalted Highness the Nizam's State	6,837
North Western	367,705
Rohilkund and Kumaon	55,993
South Indian	158,147
Total	2,354,002

68. **Mela traffic.**—Some of the important aspects of the problem of dealing with mela traffic to pilgrim centres engaging the attention of individual Railway Administrations are the designs of stations to cope with the tremendous rush of passengers during short periods, arrangements for adequate water supply, extra lighting, provision for vending of pure and wholesome food in sufficient quantities, opening of temporary booking offices at suitable centres, special medical facilities including first aid arrangements and extended sanitary arrangements. The other measures requiring the attention of the Operating officers are the drafting of a large number of special staff and arranging for the run of special trains in sufficient numbers or strengthening the booked trains by the addition of more carriages. The following paragraphs describe briefly some of the important melas in respect of which railways made special arrangements.

Assam Bengal Railway.—Twenty-four important melas were held at 14 stations and about 235,000 pilgrims travelled, *i.e.*, a decrease of about 60,000 as compared with 1938-39. Special trains or through carriages were run according to the needs of traffic. The Astami Snan melas at Shambuganj and Silghat Town occurred twice during 1938-39 as against once during 1939-40 and the Churamoni Yoga, which occurs once in twenty years, coincided with the date of the Rashjatra mela during 1938-39. The decrease in the number is due to the fact that during 1938-39 the Baruni Snan mela at Badarpur Ghat and the Mandakusi mela at Nazirhat were held but these did not take place during the current year. These in themselves accounted for about 88,000 pilgrims which is more than the decrease.

Bengal and North-Western Railway.—Syed Salar and Sawan Jhula melas were held at Bahraich and Ajodhya respectively. The Kartic Purnamashi mela was held at ten stations and the Magh mela at four stations. No less than 356 and 70 mela specials were run in connection with the Kartic and Magh melas respectively. About 446,000 pilgrims travelled in connection with these melas as compared with 503,000 during 1938-39.

Bengal Nagpur Railway.—The important melas for which special trains were run were :—

Mela.	*Place.*	*Special trains run.*
Rath Jatra	Puri	8
Kartiki	Ramtek	20
Rajim	Rajim	27
Mahadeo	Junnor Deo	9
Dol Jatra	Puri	6

As the Indian National Congress at Ramgarh concluded early owing to heavy rains and floods in Damodar River, only 46 special trains were run for the delegates and visitors to the Congress.

Bombay, Baroda and Central India Railway.—The Khwaja and Pushkar fairs at Ajmer, Makanpur fair at Araul, Masani fair at Gurgaon and Hindola and Janmashtami fairs at Muttra were the important ones held during the year, in connection with which tickets at concession rates were issued.

Eastern Bengal Railway.—For the Ganga Sagar mela, the Bengal Nagpur Railway ran specials from Bilaspur and Puri to Howrah. From there the pilgrims were taken to Sealdah by road and entrained to Diamond Harbour *en route* to Ganga Sagar. In addition to the issue of through tickets to Ganga Sagar and important stations from the Eastern Bengal, East Indian and Bengal Nagpur Railways, the following facilities were also provided for the convenience of pilgrims :—

(i) 24 ordinary and 12 special trains were run direct up to the jetty siding at Diamond Harbour;

(ii) temporary jetties were erected at Diamond Harbour;

(iii) drinking water supply and provision of waiting sheds, latrines, etc., were arranged for.

The General Manager personally visited the mela and conferred with the local authorities and representatives of the Provincial Government for increasing the facilities at the Ganga Sagar island. The Seva Samities and other social service organisations co-operated in their efforts to make the journey to the mela more convenient.

East Indian Railway.—Special measures were taken in respect of 234 out of 250 melas and fairs. Facilities were also provided to pilgrims attending important melas at foreign railway stations such as Hindola or Janmashtami melas at Muttra and Brindaban, the Urs Khwaja fair at Ajmer and Ganga Sagar mela at Sagar Island. The important melas with figures of number of pilgrims and earnings for the year 1939-40 compared with 1938-39 are as follows :—

	Number.	*Earnings.*
		Rs.
(i) *Piran Kaliar mela at Roorkee*—		
1938-39	59,900	...
1939-40	**56,400**	...
(ii) *Lunar Eclipse mela at different stations*—		
1939-40	...	**43,900**
(iii) *Hindola or Janmashtami mela at Muttra and Brindaban*—		
1938-39	2,400	3,300
1939-40	**6,100**	**17,500**
(iv) *Khwaja fair at Ajmer*—		
1938-39	5,800	48,300
1939-40	**5,900**	**44,400**

	Number.	*Earnings.* Rs.
(v) *Pitripuksh mela at Gaya*—		
1938-39	132,600	2,23,500
1939-40	**137,000**	**2,26,700**
(vi) *Kartiki mela at Garmukhtesar*—		
1938-39	156,600	98,800
1939-40	**167,100**	**1,07,100**
(vii) *Magh mela at Allahabad*—		
1938-39	231,400	2,97,578
1939-40	**279,700**	**5,02,006**

Great Indian Peninsula Railway.—The number of fairs and melas held during 1939-40 was the same as in the previous year. Details pertaining to important fairs are:—

(i) *Ashadi fair at Pandharpur.*—40,200 pilgrims were carried. Special trains were run as follows:—

	Number.
Outward—	
Bombay-Kurduwadi	2
Dhond-Kurduwadi	3
Manmad-Kurduwadi	2
Inward—	
Kurduwadi-Bombay	2
Kurduwadi-Poona	1
Kurduwadi-Manmad	6
Kurduwadi-Dhond	2

One third class bogie was specially reserved for ladies in these trains.

(ii) *Kartiki fair at Pandharpur.*—57,300 pilgrims travelled. Nine inward and fifteen outward specials were run.

(iii) *Singaji fair.*—15,000 passengers travelled to attend this important cattle fair.

(iv) *Hindola fair at Muttra.*—24,200 pilgrims travelled during the current year as compared with 21,300 in the previous year.

(v) *Khaja Bande Nawaz fair at Gulburga.*—11,400 pilgrims were carried as compared with 14,300 in the previous year. His Exalted Highness the Nizam's State Railway arranged 8 buses to run between Homanabad, Zahirabad and Gulburga and thence to Hyderabad.

(vi) *Magh mela at Allahabad.*—32,700 pilgrims travelled as compared with 19,000 in 1938-39. The following special trains were run:—

	Number.
Manikpur-Naini	3
Jhansi-Naini	1
Naini-Manikpur	2
Manikpur-Mahoba	1
Naini-Jhansi	1

(vii) *Mahadeo fair at Junnor Deo.*—The number of pilgrims came to 18,000. Five inward and four outward specials were run.

(viii) *Bheraghat fair.*—About 4,000 pilgrims were carried. Five outward and five inward specials were run between Jubbulpore and Bheraghat. A feeder bus service was also arranged to ply between Bheraghat station and the site of the fair.

Jodhpur Railway.—Special trains were run between Jodhpur and Phalodi for both inward and outward traffic in connection with the Ramdeo fair at Runicha between the 16th September and 3rd October 1939. The fair was largely attended by people from Gujrat and Kathiawar districts. Ramdeo cattle fair was held at Nagaur during February 1940.

Twenty-four minor fairs were held for ten, of which one or more specials were run.

Madras and Southern Mahratta Railway.—The following important melas were held during the year :—

Mela.	*Place.*	*Duration.*
(i) Sri Virupakshaswamy car festival.	Humpi . .	From 31st March to 11th April 1939.
(ii) Grand Audi Krithigai feast.	Tiruttani . .	7th to 16th August 1939.
(iii) Brahmotsavam feast .	Tirupati . .	16th to 24th September 1939. 13th to 22nd October 1939.
	Thiruvothiyur .	14th to 24th February 1940.
(iv) Sri Laxminarasimhaswamy car festival.	Antarvedi (Near Narasapur).	15th to 22nd February 1940.
(v) Mahasivarathri feast .	Kottappakonda . (Near Narasarao-pet).	3rd to 9th March 1940.
	Kalahasti . .	3rd to 13th March 1940.
	Srisailam & Mahanandi (Near Nandyal).	4th to 14th March 1940.
(vi) Grand Masi new Moon feast	Trivellore . .	8th to 10th March 1940.

All trains were strengthened and special trains were run where necessary.

Mysore Railways.—Dasara at Mysore.—For this mela, which lasted from the 13th to 22nd October 1939, special trains were run.

Mahamastakabhisheka at Sravanabelagola.—This mela which occurred after 15 years lasted from the 11th to end of February 1940. 30,000 passengers, mostly Jains, attended from all parts of India. Coaching stock was taken on loan from the Madras and Southern Mahratta and South Indian Railways to deal with the traffic and hire and haulage charges amounting to about Rs. 13,800 was paid. The following local festivals were also held :—

Karaga at Bangalore City.
Shasti at Maklidrug.
Mahasivaratri at Nandi.
St. Anthony's Feast at Dornhalli.
Dod Jatra at Nanjangud Town.

His Exalted Highness the Nizam's State Railway.—During the year eleven important melas were held and these were attended by about 131,000 pilgrims as compared with 160,000 during the previous year. Special trains were run in connection with :—

(i) Mukkoti Ekadesi festival at Bhadrachellam Road.
(ii) Kesavaswamy jatra at Gadwal.
(iii) Mahasivaratri fair.

North Western Railway.—Arrangements were made to convey pilgrims to 7 melas on the home railway, four on the East Indian and one each on the Bengal Nagpur, Bombay, Baroda and Central India, Great Indian Peninsula and Mysore Railways.

Rohilkund and Kumaon Railway.—Special trains or extra carriages attached to booked trains were run, as necessary, for pilgrims attending Lunar Eclipse, Sawan and Bhuth Nath, Kartic Purnamashi, Maragsri, Sheoratri and Chaiti melas.

South Indian Railway.—The number of passengers attending the festivals during 1939-40 compared as follows with those for the previous year :—

Festival.	*Place.*	*Number.* 1938-39.	**1939-40.**
Vaisagam	Tiruchendur	23,400	**23,100**
Garudothsavam	Conjeeveram	36,800	**31,600**
Ani Thirumanjanam	Chidambaram	25,200	**23,100**
Adi Thapas	Sankaranayinarkovil	23,400	**11,100**
Velanganni	Negapatam	24,000	**21,200**
Kandoori	Nagore	36,200	**32,100**
Grand Krithigai	Thiruvannamalai	37,800	**21,200**
Vaikunta Ekadesi	Srirangam	31,500	**31,300**
Arudra Darsanam	Chidambaram	26,400	**27,700**
Masi	Thiruchendur	19,000	**22,400**

Booked trains were generally strengthened and trains were stopped at temporary ' Train halts ' wherever possible. Special trains were also run whenever found necessary. The continued economic depression and breaches on the chord and main lines as well as branch lines contributed to the decrease in number.

69. **Measures taken to ensure civility and honesty on the part of railway staff.**—This important matter continued to engage the special attention of railways during the year under review. Mention may be made of the action taken by the Eastern Bengal and East Indian Railways in this connection.

East Indian Railway.—A special officer was deputed to investigate this question and the report submitted by him is under consideration.

Eastern Bengal Railway.—At an informal meeting between the different Chambers of Commerce and the railways serving Calcutta, it was suggested to the Chambers that the various organizations of the trading community should induce their members to stop paying illegal gratification to the railway staff. The railways on their part undertook to see that no annoyance or victimization was caused to merchants on this account. In order to help the Chambers to collect and supply essential and complete evidence in support of complaints regarding demands for illegal gratification, a questionnaire form has been drawn up by the Eastern Bengal Railway and future complaints against railway staff will be accompanied by these forms duly filled in. It is hoped that this will assist in bringing the charges home to the staff at fault and enable the railway to deal with them suitably.

CHAPTER V.

PUBLICITY.

70. **Central Publicity Bureau.**—Due to the international situation early this year and the subsequent outbreak of hostilities, the activities of the Central Publicity Bureau were curtailed. Drastic reductions were also made in the advertising allotment of the London Bureau, including a cut of £1,200 for editorial propaganda. The advertising campaign in connection with Australian tourist traffic was however continued and a sum of Rs. 2,000 was again spent in connection with this effort.

70.1. **Advertisement through posters, handbills and pamphlets.**—The major portion of the allotment for advertisement was spent in fostering lower class traffic, and the following important *melas*, having an all-India interest, were selected for special propaganda by the Central Publicity Bureau in co-operation with railways :—

(i) Rath Jatra at Puri.

(ii) Pitripukh mela, Gaya.

(iii) Kartiki mela at Garhmukhtesar.

(iv) Mahamastakabisheka at Sravanabelagola, Mysore State.

(v) Magh mela, Allahabad.

Altogether 1,021,000 handbills were issued in connection with these *melas* by the Central Publicity Bureau, as well as 1,100 letterpress posters and 74,000 folders. These *melas* were also largely advertised in English and Indian language newspapers. During Pitripukh mela the number of pilgrims handled and the total earnings derived showed a marked improvement over other years. In connection with the Kartiki mela at Garhmukhtesar, a lorry, equipped with a powerful loudspeaker, microphone attachment, cinema machine, and gramophone, toured the country side for 17 days, visiting 17 important centres and 189 villages. Leaflets, handbills and posters were distributed in villages and towns and short talks were given to the public on the importance of a visit to Garhmukhtesar during Kartiki and on railway travel facilities and travel in general.

On the occasion of the Mahamastakabisheka Jain festival at Sravanabelagola (Mysore State) this year, which festival occurs once in 15 years, special efforts were made in co-operation with railways by the Central Publicity Bureau to stimulate traffic to Mysore. Over 200,000 handbills advertising railway concessions in fares on the different railways were distributed by the Bureau, and in co-operation with the Jain Sabhas in Delhi, a special All-India Digamber Jain Sangh train was arranged and run from Delhi. 13 adults and 4 children travelled Second Class, and 290 adults and 31 children travelled Third Class in this train. A sum of Rs. 21,610 was realized in fares.

The following new posters were produced by the Central Publicity Bureau during the year :—

1. Street scene, Benares	4,000 copies.
2. Fatehpur Sikri by moonlight	4,000 ,,
3. Buddha	4,000 ,,
4. Darjeeling	4,000 ,,
5. Queue habit	5,000 ,,
6. Queue habit (second design)	13,000 ,,

The queue habit posters were produced on instructions from the Railway Board with a view to instil the queue habit among lower class passengers. The posters were printed with different captions and distributed to various railways for exhibition in their booking halls, stations, etc. A negative sound film in Hindustani with 3 positive copies was also produced in connection with the queue habit campaign. These have been shown at principal Indian cinemas in Bombay, Calcutta and other cities.

A second, and more attractive, edition of the "Handbook of India" was brought out during the year, of which 100,000 copies have been printed. The popularity of this booklet may be appreciated by the fact that the first edition, of which 100,000 copies were originally ordered, ran out of stock within six months of its issue.

To stimulate traffic from Ceylon to Buddhist pilgrimage centres in Northern India, a special Sinhalese translation of the pamphlet "Buddhist Places of Pilgrimage" was made. 15,000 copies of this booklet have been printed and will be distributed throughout Ceylon through the various Maha Bodhi Societies and other Buddhist Institutions.

A revised edition of the pamphlet "Indian places of pilgrimage" was also published for general distribution this year in the following Indian languages:—

Marathi	10,000 copies.
Gujerati	5,000 ,,
Tamil	10,000 ,,
Telugu	10,000 ,,
Bengali	15,000 ,,
Hindi	20,000 ,,

A special illustrated pamphlet dealing with prominent places of pilgrimage on the banks of the Ganges was published this year, of which 15,000 copies were printed in Hindi, 10,000 in Urdu and 15,000 in Bengali.

70.2. Photographs.—About 13,000 photographs were produced during the year. These were distributed among Railways, foreign travel associations, tourists and tourist agencies, presses, Government departments, hotels and newspapers. The supplies to the London office were discontinued shortly after the outbreak of War.

Two Publicity Officers' meetings were held during the year, at which 31 subjects of mutual interest were discussed. The Central Publicity Officer continued to receive press bulletins from railways for publication in newspapers, and by an arrangement with the Principal Information Officer, Home Department, Government of India, it was possible to send copies of the bulletins to about 400 newspapers, of which 250 were English newspapers, 70 Urdu newspapers and 80 Hindi newspapers.

71. Publicity by Railways.

71.1. Melas.—Publicity activities in connection with 352 *melas* were undertaken by railways this year, and in many cases special measures were undertaken to advertise them in towns and villages and in areas distant from railway stations. In connection with the Dasara Festival held at Mysore, pictorial postcards incorporating particulars of the concessions available were posted in advance by the Madras and Southern Mahratta Railway to all potential upper class passengers. Special facilities were provided by the Eastern Bengal Railway for traffic to the Ganga Sagar Mela, and, with the object of preventing railway ticket holders from getting mixed up with people travelling by foreign steamer services, the reverse of all combined river-cum-rail tickets was printed with a picture of the God Ganesha. An illustrated

pamphlet giving the details of *melas* at Bengal Nagpur Railway stations was issued by the Bengal Nagpur Railway, in which much information has been incorporated regarding railway concessions available and giving a list of dharamsalas, hotels and boarding houses.

71.2. Handbills, folders, pamphlets and posters.—The following posters, handbills, folders and pamphlets were distributed during the year by Railways in India. The total excludes the handbills, etc., which were distributed by the Central Publicity Bureau :—

	1938-39.	1939-40.
Handbills	6,000,000	6,960,800
Folders and pamphlets . . .	108,600	872,675
Posters	173,000	155,945

To encourage students and teachers to visit South India, an illustrated pamphlet was issued by the South Indian Railway detailing the concessions and facilities allowed to students and teachers going on excursion. A new pamphlet " Visit South India " was also issued by the South Indian Railway for general sale to the public in the form of a travellers' guide.

Special double crown posters dealing with pilgrim centres and other places worth visiting were exhibited in third class coaches of the Bombay suburban section of the Great Indian Peninsula Railway.

71.3. Reciprocal publicity.—This was continued between Indian Railways. In many cases of overseas railways, reciprocal publicity arrangements were suspended due to the international situation. The South Indian Railway and the Posts and Telegraphs Department entered into a reciprocal arrangement for the display of their posters and other publicity literature.

71.4. Loudspeakers.—These were extensively used by the East Indian Railway in the *mela* areas at important stations. For the Kartiki mela at Pandharpur on the Great Indian Peninsula Railway a motor van was fitted with a loudspeaker and cinema apparatus as an experimental measure. The unit visited 13 towns and villages daily and the attendance at some of the places was not less than 8,000 to 10,000 people.

71.5. Cinema car.—142 stations were visited and 239 shows were given by the cinema car attached to the North Western Railway. The attendance at these exhibitions has been estimated to have been over six lakhs of people.

143 open air talkie shows were also given at 86 stations by the cinema car unit belonging to the Eastern Bengal Railway, and at 14 of their institutes.

71.6. Newspaper advertising.—The following expenditure was incurred by principal railways on account of advertising in newspapers and periodicals :—

Railway.	1938-39.	1939-40.
	Rs.	Rs.
Eastern Bengal	56,575	49,030
East Indian	43,554	42,634
Great Indian Peninsula	23,245	29,810
Madras and Southern Mahratta . . .	12,716	13,773
North Western	54,345	52,721

Publicity was given in newspapers to the various concessions and facilities offered by railways throughout the year in connection with all important festivals, *melas* and holidays, and in connection with some of the principal hot weather resorts in India. Free space was also obtained for publication of press notices, bulletins, articles, etc.

71.7. Trade advertisements.—The gross revenue secured from trade advertisements, bookstalls, bazaar specials, etc., during the year by some of the principal railways amounted to :—

Railways.	1938-39.		1939-40.	
	Rs.	£	Rs.	£
Bombay, Baroda and Central India	66,678	...	65,544	...
Eastern Bengal	47,401	...	50,051	...
East Indian	63,993	...	54,638	...
Great Indian Peninsula	68,997	+58	48,384	+42
North Western	49,702	...	41,648	...
South Indian	53,120	...	52,331	...

Efforts continued to be made to increase the revenue from commercial and other trade advertisements, but, owing to the outbreak of War, many firms have had to curtail their advertisement expenditure.

With a view to stimulating trade advertisements, an attractive booklet was issued by the Great Indian Peninsula Railway showing the scale of charges and emphasizing the advantages of advertising on the Railway. A press campaign was also instituted during the year by that railway drawing the attention of the commercial community to the excellent facilities offered for trade and other advertisements.

The level of earnings on the South Indian and the Eastern Bengal Railways has remained about the same, mainly due to tapping new sources of revenue and adjustment of rates to suit market conditions

71.8. Excursion trains.—An appreciable increase of traffic has resulted to the Bombay, Baroda and Central India Railway from their efforts to popularise these excursions. The comparative figures for 1938-39 and 1939-40 are :—

	Number of specials.	Bogie carriages.	Profits.
			Rs.
1938-39	17	38	75,924
1939-40	19	43	96,005

Six " Conducted Third Class Local Excursion " tours were also run on the Bengal Nagpur Railway, carrying a total of 2,690 passengers, from which a gross earning of Rs. 44,676 accrued.

On the South Indian Railway ten excursion parties in special trains and 25 parties in reserved carriages travelled, resulting in a gross income of Rs. 63,250 to that railway. 72 student excursion parties comprising of 6,125 members also travelled, including a party of 150 students of the University of Bombay travelling 2nd class on a tour of South India. The net earnings to the South Indian Railway on account of these students' excursions were Rs. 24,000.

The efforts made by the Bengal Nagpur Railway to interest educational Institutions in travel resulted in a party of students from Raj Kumar College, Raipur, to undertake an educational tour on the railway, which brought in earnings amounting to Rs. 1,568.

71.9. Circular tours, zone tickets, etc.—These continued to be widely advertised and appear to be becoming more popular every year. On the Bombay, Baroda and Central India Railway, for instance, zone tickets issued on two occasions during the year, in July 1939 and January 1940, resulted in the following traffic :—

	Number.	Earnings.
		Rs.
July 1st to 20th, 1939	61,555	5,06,236
January 11th to 31st, 1940	69,038	5,65,076

" All-India Circular Tour tickets " on that railway were availed of by 1,334 passengers, which gave an earning of Rs. 96,744.

" Standard Circular Tours " were introduced for the first time on the Bengal Nagpur Railway this year. Wide publicity was given during the year to round tours on the Assam Bengal Railway, in which connection the Administration distributed 10,000 booklets, 5,000 posters and 1,000 handbills.

71.10. Bazaar specials.—A Poojah Bazaar special train was run over the broad and metre gauge sections of the Eastern Bengal Railway during September and October 1939. 15 firms participated in this special, resulting in a cash turnover to them of Rs. 2,65,000, besides the securing of many orders from out-stations. 36 stations were visited, at which it has been estimated that 400,000 people visited the Bazar Special. The gross railway revenue amounted to Rs. 17,495 as against Rs. 17,133 secured in the preceding year. A Joint Trade Exhibition trian was also run over the Great Indian Peninsula, His Exalted Highness the Nizam's State, Madras and Southern Mahratta, Bengal Nagpur, East Indian and Bombay, Baroda and Central India Railways, covering a distance of 3,600 miles. 15 firms participated in exhibiting their wares on this train and the gross earnings to railways amounted to Rs. 27,000.

71.11. Miscellaneous activities.—Advertisement " Stuffers ", printed in two colours on glazed butter paper advertising mileage coupon tickets, standard tours, express goods service, etc., were made use of by the Great Indian Peninsula Railway, as enclosure to the correspondence with the public. Poster stamp advertising was also resorted to by that railway. In co-operation with the Western India Match Company, His Exalted Highness the Nizam's State Railway arranged for the distribution of 100,000 match boxes pasted with a label bearing the design of Ajanta and Ellora Caves. The news bulletin containing the latest news from Reuters' Agency was continued on the Frontier Mail and on the week-end Flying Ranee. A staff calendar was issued by the Great Indian Peninsula Railway with slogans dealing with subjects, such as courtesy, punctuality, tidiness, and methods of increasing revenue. In this connection letterpress posters appealing to the travelling public in the matter of courtesy, cleanliness, discouraging begging and hawking in trains were also issued.

CHAPTER VI.

RAILWAY COLLIERIES.

72. The quantity despatched from the principal railway collieries during the year 1939-40 compares with the previous year's issues as follows :—

Colliery.	Owned by (Railways)	Quantity despatched (tons).	
		1938-39.	**1939-40.**
1. Bhurkunda . . .	State	168,086	**105,429**
2. Kargali	State	661,352	**702,912**
3. Kurharbaree and Serampore	State	701,597	**685,392**
4. Joint Bokaro . . .	E. I. & B. N. . .	1,030,621	**1,052,436**
5. Joint Sawang . . .	E. I. & B. N. . .	48,401	**48,641**
6. Jarangdih . . .	B., B. & C. I. and M. & S. M.	93,572	**79,082**
7. Talcher	M. & S. M. . . .	190,302	**200,101**
8. Kurasia	B., B. & C. I. . .	283,318	**282,158**
9. Deulbera	B. N.	136,687	**118,667**
10. Argada	B. N.	321,690	**314,745**

73. State Railway Collieries.

73.1. Bhurkunda Colliery.—Coal despatched to railways, etc., during the year amounted to 105,429 tons.

In No. 1 Kurse Incline, winning of coal by pillar extraction continued until August 1939 when due to heating on the west side the goaf area had to be sealed off and the working of this Incline suspended. Working in No. 2 Kurse Incline also had to be suspended until August 1939 owing to the presence of black damp in the air current but was resumed after the goaf area in No. 1 Incline had been sealed off.

First working of No. 3 Kurse Incline by the formation of pillars was carried on throughout the year. Nos. 1 and 2 Nakari Inclines were developed by main and companion Dips.

Owing to restricted working no coal was raised from the Simana or Sirka Seams during the year.

73.2. Kargali Colliery.—Coal despatched to Railway and other Government Departments amounted to 702,912 tons.

Quarries.—In No. 1 Quarry the main broad gauge track was moved to the Dip of the Seam.

In No. 2 Quarry the coal faces and bridge pillars had to be isolated from fires which broke out in the overburden dump.

During the monsoon season water accumulated in No. 3 Quarry to a depth of 26 feet and considerably handicapped the working of the bottom

coal. A drainage gallery is now being driven on the floor of the seam to the Karo pumping shaft, which, it is expected, will keep the quarry free from water during the next monsoon.

Underground workings.—Throughout the major portion of the year there was a shortage of skilled labour for the underground working. This and the frequent intrusions of stone encountered in the seam itself made progress in the main heading very unsatisfactory.

In the Karo Incline in the top section workings at No. 2 Quarry, a drainage shaft was started in the Karo Barrier and by the end of the year had reached within a few feet of the top of the seam.

In the 12′ seam Incline the Main Endless Haulage was extended along the main level and the amount of hand tramming considerably reduced.

73.3. Kurharbaree Colliery.—The quantity of coal despatched to railways, etc., amounted to 354,804 tons.

Depillaring and development works were carried out throughout the year.

In the Joktiabad Mine on No. 5 side the roof near the barrier became very friable as a result of which the top section coal had to be left as a support in some places.

In the Jubilee Pit at No. 4 side the development of the bottom section in the area beneath the top section goaf has been completed and pillar cutting is now being carried out under extremely difficult conditions owing to the heavy nature of the middlestone and the fact that the main roof above has already collapsed.

73.4. Serampore Colliery.—Despatches from this colliery amounted to 330,588 tons.

Some of the wide roads made many years ago in the Central Pit in No. 3 side have collapsed and roads have now to be driven over the top of this area to work the inbye pillars of coal.

Depillaring in all other districts continued satisfactorily throughout the year.

A small percentage of inflammable gas was reported at various times, throughout the year, in the Deep Pit workings.

Coke and bye-products plant.—The outturn from this plant was—

		1938-39.	1939-40.
Coke	Tons	45,740	**29,215**
Coal tar	,,	1,733	**1,251**
Sulphate of ammonia	,,	417	**315**
Benzol	Gallons	51,153	**44,163**
Rectified solvent	,,	2,290	**1,390**

73.5. East Indian and Bengal Nagpur Railways' Joint Bokaro Colliery.—The despatches from this colliery amounted to 1,052,436 tons.

A drainage gallery was driven from No. 1 Quarry to No. 1 Quarry Extension and all surface water dealt with by No. 1 Quarry Electric Pumps.

Development work in No. 1 Quarry Extension was pushed on as rapidly as possible with the result that output from this area has steadily increased.

The dyke in No. 5 Quarry has been removed and the working of the whole face of the quarry has now been greatly facilitated.

73.6. East Indian and Bengal Nagpur Railways' Joint Sawang Colliery.—Despatches from this colliery owing to restricted development only amounted to 48,641 tons.

Coal was mined partly from the quarry area and partly from inclines.

74. Company-managed Railway Collieries.

74.1. Bombay, Baroda and Central India and Madras and Southern Mahratta Railways' Jarangdih Colliery.—Despatches from this colliery amounted to 79,082 tons.

Shaft working.—The shaft workings remained closed throughout the year and the water level in the shafts is now within 67 feet of the surface.

Inclines.—In No. 3 Incline the limit of working with the present haulage was reached early in the year and there was consequently very little development in the dip. The lower levels on the north side encountered the fault which forms the natural boundary of the workings on the north side and on the South No. 23 South level was driven through the fault to prove the seam along the line of strike.

No. 21 South level is now being driven through the fault to facilitate ventilation of the lower levels.

In No. 5 Incline development proceeded normally and according to plan and the main headings made good progress to the dip in heavily watered strata.

Arrangements are now being made to instal the 48 h.p. pump in 28 North level and a 20 h.p. pump in No. 1 West Slant.

The Sirocco fan operated very satisfactorily throughout the year and all working places were kept free from gas.

Electrification.—Minor works required under the Indian Electricity Rules, 1937, were carried out during the year :—

	1938-39.	1939-40.
Units consumed	901,092	**932,415**

The average cost per unit worked out at 9 pies for the year under review against 10·79 pies for the previous year.

Labour.—The attendance of miners and loaders varied considerably throughout the year, attendance during the monsoon and harvesting periods being particularly poor.

Accidents.—There were no fatal accidents and only one serious accident occurred during the year.

74.2. Madras and Southern Mahratta Railway's Talcher Colliery.—The total quantity of coal despatched from this colliery to the Madras and Southern Mahratta Railway amounted to 200,101 tons.

Underground workings.—Development underground was normal and gallery drivage amounted to 47,541 feet despite the occurrence of faults and other adverse conditions below ground.

In the south-east section an upthrow fault of 35 feet was met and a pilot gallery was driven through the fault to prove the coal in the area beyond.

Despatches were, due to the elimination of women labour and unrest in the Talcher State, seriously affected during the earlier part of the year. Excessive humidity in some of the underground districts during the monsoon period was also the cause of a loss of output.

Twelve new mine cars were put into service.

Surface works.—Eleven new blocks of labour quarters and a second masonry tank for the supply of drinking water were completed during the year.

Endless haulage for removal of slack coal.—The engine room and engine foundation have been completed.

Labour.—The attendance of labour was, due to unrest in the State, unsatisfactory during the first half of the year. Attendance gradually

improved, however, during the second half of the year. The average number of persons employed daily were :—

1938-39	1,305
1939-40	**1,430**

Medical.—The number of patients treated at the hospital and dispensary was 34,689.

74.3. Bombay, Baroda and Central India Railway's Kurasia Colliery.—The total quantity of coal despatched from this colliery to the Bombay, Baroda and Central India Railway amounted to 282,158 tons.

Underground workings.—Development underground proceeded satisfactorily, a total advance of 388 feet in No. 2 Incline and 395 feet in No. 3 Incline being obtained during the year.

Despatches towards the end of the year were somewhat hampered due to the short supply of empties by the Bengal Nagpur Railway a total of only 13,200 wagons for the year being supplied against indents for 13,990.

The supply of underground labour was also unsatisfactory as many of the miners were attracted to the Jharia Coal-field where higher rates of wage were being paid and where better climatic conditions prevail.

Buildings.—The following building works were taken in hand and completed :—

(*a*) One block of senior subordinate quarters containing two units.
(*b*) Six blocks of junior subordinate quarters each containing two units.
(*c*) Four blocks of artisan quarters each containing four units.
(*d*) Thirty blocks of labour quarters each containing six rooms.

All colliery plant and machinery were maintained in good order throughout the year.

Electrical works.—The following works were carried out during the year under review :—

(i) Ventilating fan motor was thoroughly overhauled.
(ii) Motor of No. 1 coal cutting machine was overhauled.
(iii) A new overhead trolley line of about 8,000 feet was extended in Nos. 2 and 3 Inclines.

74.4. Staff welfare.—The health of the labourers in all the collieries was generally good and the state of sanitation satisfactory.

75. Coal mined in India.—In 1939 the coal mined in the various provinces of British India amounted to 24,662,788 tons as against 25,276,743 tons in 1938 or a decrease of 613,955 tons.

76. Coal despatched by rail.—The quantity of coal carried by the East Indian and Bengal Nagpur Railways was as follows :—

Railway.	1938-39 Tons.	**1939-40 Tons.**
East Indian	14,554,400	**15,403,708**
Bengal Nagpur	8,790,828	**9,741,700**

77. Coal shipped from Calcutta.—Shipments including Bunker Coal from the Port of Calcutta to Indian and Foreign Ports during 1939-40 amounted to 3,217,509 tons as compared with 2,920,118 tons in 1938-39. 160,274 tons of Indian Coal was shipped to the Ceylon Government Railway.

78. Tonnage of coal inspected.—The State Railways' Coal Department inspected 7,894,539 tons of coal during 1939-40 as compared with 7,723,656 tons in 1938-39.

79. Indian Coal Grading Board.—The State Railways' Coal Department continued to carry out work on behalf of the Indian Coal Grading Board during the year. The amount of cargo coal shipped under the Indian Coal Grading Board to various ports during 1939 was 2,642,205 tons and inspections were carried out by this Department both at the collieries and Kidderpore Docks.

CHAPTER VII.

ROLLING STOCK AND MATERIALS.

80. Additions to equipment.—During the year the following locomotives and rolling stock, including arrears brought forward from previous years, were on order for broad and metre gauge railways :—

Items.	Broad gauge.	Metre gauge.
Locomotives	58	46
Coaching stock	772	574
Goods stock	3,713	1,346

New locomotives and rolling stock actually placed on the line during the year were as under :—

Items.	Broad gauge.	Metre gauge.
Locomotives	23	22
Coaching stock	326	277
Goods stock	3,495	535

The numbers of coaching and goods stock shown are in terms of four-wheelers, a bogie being reckoned as two four-wheelers. These figures do not, however, represent the actual net additions to rolling stock as they include vehicles built in replacement of stock which had reached the end of its economic life.

80.1. Engines.—23 broad gauge locomotives were added of which 21 were on replacement account and 2 were additions. On the metre gauge the 22 locomotives were all additions. The average tractive effort per engine rose from 26,025 lbs. in 1938-39 to 26,093 lbs. in 1939-40 on the broad gauge, while on the metre gauge it fell from 14,957 lbs. in 1938-39 to 14,938 lbs. in 1939-40.

80.2. Coaching vehicles.—At the end of the year, the number of coaching vehicles on the broad gauge was 127 less than at the beginning, 453 having been scrapped of which 326 were replaced. On the metre gauge, the number at the end of the year was more by 6; 277 having been added of which 271 were replacements.

80.3. Wagons.—On the broad gauge 902 were scrapped during the year against an addition of 3,495. On the metre gauge 360 were scrapped and 535 were added.

The graphs on the following pages show the total number of locomotives, boilers, carriages and wagons sanctioned for Class I Programme Railways during the past fourteen years. These figures represent not only additional rolling stock but also stock on replacement account.

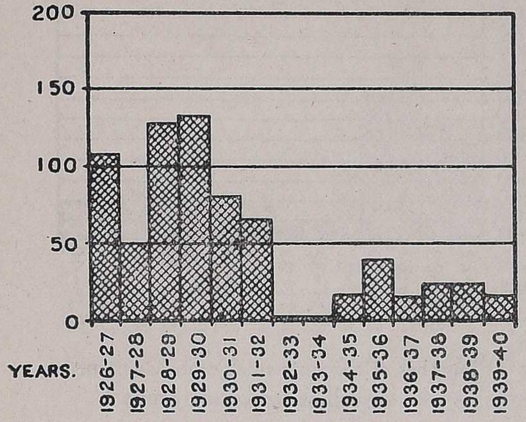
81. Reduction of upper class stock.—Railways continued to examine the possibility of further reductions in upper class accommodation.

First class accommodation was abolished on two trains on the Villupuram-Cuddalore section of the South Indian Railway and on the Amla-Parasia branch of the Great Indian Peninsula Railway.

The policy on the Eastern Bengal Railway of converting first, second and intermediate class bogies into first, second, intermediate and third, to provide increased accommodation for intermediate and third class passengers, was continued during the year under review with the result that 3 broad gauge bogie first and second class, 13 broad gauge bogie first, second and intermediate class and 4 metre gauge bogie first, second and intermediate class and 4 metre gauge bogie first, second and intermediate class were converted into first, second, intermediate and third class.

(1)

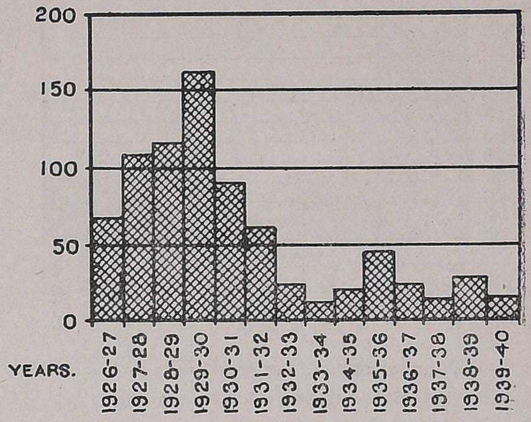
BROAD GAUGE.



Number of locomotives sanctioned in the rolling stock programme.

(2)

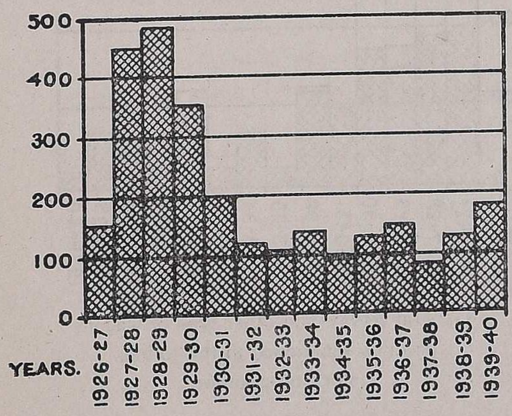
METRE GAUGE.



Number of locomotives sanctioned in the rolling stock programme.

(3)

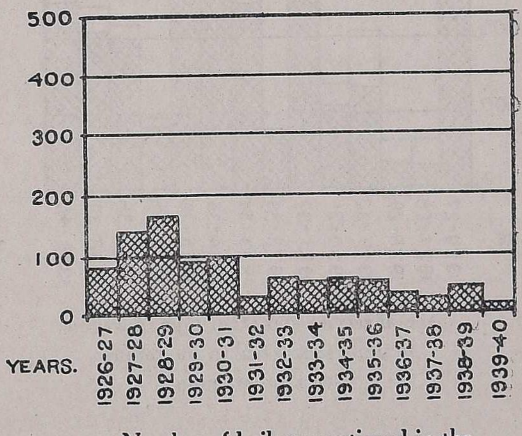
BROAD GAUGE.



Number of boilers sanctioned in the rolling stock programme.

(4)

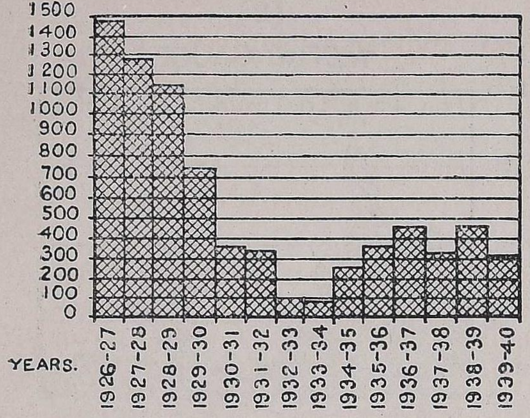
METRE GAUGE.



Number of boilers sanctioned in the rolling stock programme.

(5)

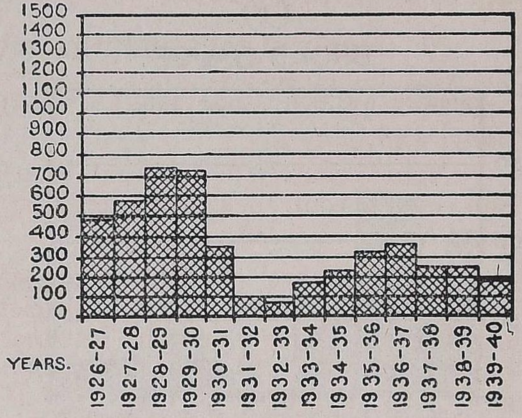
BROAD GAUGE.



Number of coaching stock units sanctioned in the rolling stock programme.

(6)

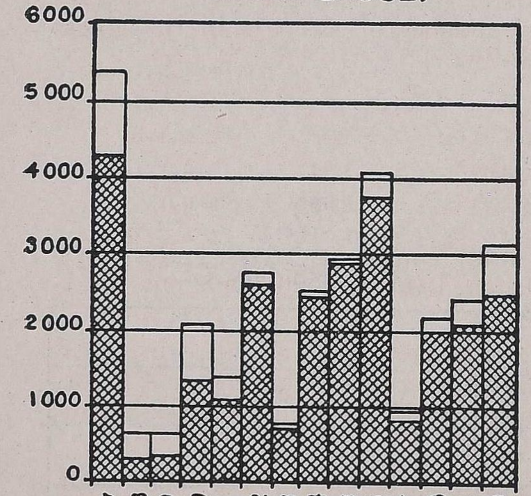
METRE GAUGE.



Number of coaching stock units sanctioned in the rolling stock programme.

(7)

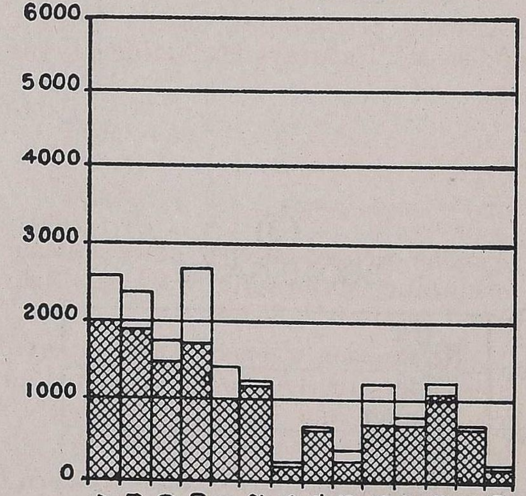
BROAD GAUGE.



General service and other type of wagons in units sanctioned in the rolling stock programme.

(8)

METRE GAUGE.



General service and other type of wagons in units sanctioned in the rolling stock programme.

General service wagons shown thus (cross-hatched)

Other types shown thus (blank)

On the North Western Railway the broad gauge authorised upper class stock was reduced by 14 first and second and 3 second class bogies.

The first class accommodation provided by railways was reduced by 816 seats in 1939-40.

82. Supply of rails and fishplates from indigenous sources.—During the year under review orders amounting to 84,549 tons of rails and 2,831 tons of fishplates were placed with Messrs. The Tata Iron and Steel Company, Ltd.

Approximately 50 per cent. of all rails manufactured by this firm was subjected to controlled cooling by the Sandberg process, which was introduced from November 1939.

83. Purchase of timber for carriage and wagon building.—The total value of timber other than sleepers bought by Class I Railways (excluding Jodhpur, Mysore and His Exalted Highness the Nizam's State Railways) during the year was 39·04 lakhs as compared with 46·83 lakhs in 1938-39 and 34·94 in 1937-38.

The kilns at Lillooah remained closed throughout the year.

84. Wooden sleeper Purchase Organisation.—The total purchase of wooden sleepers during the last four years has been :—

No. of sleepers in lakhs.

	1936-37.	1937-38.	1938-39.	1939-40.
Broad gauge .	15·05	12·59	13·64	13·37
Metre gauge .	14·83	14·28	15·23	14·15
Narrow gauge .	1·71	1·61	1·95	2·21

The relative position of various kinds of sleepers can be seen from the following percentages, based on the total number of sleepers in the track of Class I Railways (excluding Mysore Railway) :—

1939-40.

	Wood.	Cast Iron.	Steel.	Other kinds.
Broad gauge . .	40·80	41·80	17·17	0·3
Metre gauge . .	70·00	5·14	24·91	0·01

The wooden sleeper track mileage of all gauges on Class I Railways (excluding Mysore Railway) on 31st March 1940 was 26,369·3 out of a grand total of 50,858·6.

No wooden sleepers were imported except from Burma. The price of sal sleepers in the Eastern Group in 1939-40 averaged about Rs. 5-4-9 for broad gauge and Rs. 2-5-4 for metre gauge compared with Rs. 4-12-8 and Rs. 1-14-8 respectively in 1938-39.

At Dhilwan on the North Western Railway the following soft wood broad gauge sleepers and narrow gauge sleepers of coniferous trees were impregnated with a mixture of 40 per cent. creosote and 60 per cent. of fuel oil :—

—	Fir.	Chir pine.	Kail pine.	Deodar.	Total.
	No.	No.	No.	No.	No.
1. Number of sleepers treated { Broad gauge . .	37,213	297,411	..	96,682	431,306
1. Number of sleepers treated { Narrow gauge . .	..	..	..	2,436	2,436
	Lbs.	Lbs.	Lbs.	Lbs.	
2. Average absorption per broad gauge sleeper of 40 per cent. of creosote mixture.	6	6	..	4	
3. Average absorption per broad gauge sleeper of 60 per cent. fuel oil mixture.	9	9	..	6	
4. Average total absorption per sleeper . . .	15	15	..	10	
5. Approximate average absorption per c. ft. . .	5	5	..	3·3	

The cost of treated sleepers, for the year 1939-40 was slightly higher than last year. This was due partly to the rise in the price of sleepers and partly to the new method adopted in calculating the treating charges.

—		Average cost per sleeper untreated.	Cost of treating per sleeper including freight on sleeper to Dhilwan.	Overhead and, other charges *i.e.*, Control Charges.	Total average cost per treated broad gauge sleeper.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Deodar	Broad gauge	4 9 0	0 15 2	0 3 0	5 11 2
	Narrow gauge	1 10 0	0 6 0	0 3 0	2 3 0
Kail pine		..	..	..	..
Chir pine		3 5 0	1 9 9	0 3 0	5 1 9
Fir		2 11 6	1 0 3	0 3 0	3 14 9

The total amount spent on wooden sleepers on Class I Railways (excluding His Exalted Highness the Nizam's State, Jodhpur and Mysore Railways) was Rs. 1·20 crores in 1939-40 compared with Rs. 1·02 crores in 1938-39 and Rs. 1·03 crores in 1937-38.

The annual meeting of the Sleeper Pool Committee was not held in 1939.

85. Value of railway materials purchased.—The value of stores purchased by Class I Railways (excluding the Jodhpur, His Exalted Highness the Nizam's State and Mysore State Railways which are mainly or wholly the property of Indian States) increased from Rs. 16·80 crores in 1938-39 to Rs. 17·67 crores in 1939-40. The value of "indigenous materials" purchased increased by Rs. 95 lakhs while that of "imported materials" declined by Rs. 8 lakhs. It will be observed from the statement below that, taking both the heads together, the principal increases were under permanent-way material and track tools (55 lakhs), stores, hardware, copper, tin, zinc ware, etc. (19 lakhs) and miscellaneous stores (23 lakhs): the variations under other heads are not appreciable.

(Figures in lakhs.)

Particulars.	Value of imported materials.			Value of indigenous materials.	Total purchases.	
	Purchased direct.	Purchased through agents in India.	Total imported materials.		**1939-40.**	1938-39.
	Rs.	Rs.	Rs.	Rs.	**Rs.**	Rs.
A. Bridge work and its parts, fittings and special fastenings.	..	8	8	8	**16**	9
B. Engineering plant and components including all hand and power machinery.	..	6	6	1	**7**	8
C. Workshop machinery, plant and equipment including pneumatic machinery and tools.	6	20	26	1	**27**	34
D. Permanent-way material and track tools.	4	13	17	3,19	**3,36**	2,81
E. Rolling stock	1,05	1,51	2,56	1,33	**3,89**	3,87
F. Building materials, water mains, sewage system and track and yard enclosing materials and signal and interlocking materials, etc.	3	15	18	35	**53**	59
G. Stores hardware, copper, tin and zinc ware, all leather, canvas and India rubber in bulk, metals, painters' stores, timber and fuel and fuel oil, etc.	13	1,40	1,53	4,57	**6,10**	5,91
H. Electrical and train and Locomotive lighting plants and materials, etc., and telegraph and telephone equipment.	4	50	54	10	**64**	69
All other stores	4	1,01	1,05	1,60	**2,65**	2,42
TOTAL	1,39	5,04	6,43	11,24	**17,65**	16,80

86. Value of stores purchased by State-managed and Company-managed railways during 1931-32 to 1939-40, value of stores purchased by those railways through the Indian Stores Department and value of stores purchases controlled by the Railway Board for those railways during that period.—A statement is given below showing the value of stores imported direct, imported stores purchased in India and indigenous stores purchased by the State-managed and Company-managed railways during the years 1931-32 to 1939-40 together with the value of stores purchased by those railways through the Indian Stores Department and also the value of stores purchases controlled by the Railway Board during the same period :—

(Figures in thousands of rupees.)

Railways.	TOTAL VALUE OF STORES PURCHASED.				Value of stores purchased through Indian Stores Department.	Percentage Column 6 to Column 5.	Value of stores purchases controlled by the Railway Board.	Percentage Column 8 to Column 5.
	Stores imported direct.	Imported stores purchased in India.	Stores of Indian manufacture or of indigenous origin.	Total.				
1	2	3	4	5	6	7	8	9
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1931-32.								
State-managed	1,03,23	2,91,56	5,47,71	9,42,50	1,18,08	12·53	4,51,48	47·90
Company-managed	1,41,21	1,28,46	3,87,24	6,56,91	7,87	1·20	1,73,73	26·42
TOTAL	2,44,44	4,20,02	9,34,95	15,99,41	1,25,95	7·87	6,25,21	39·10
1932-33.								
State-managed	8,54	2,26,28	3,95,16	6,29,98	1,46,84	23·38	2,61,05	41·44
Company-managed	79,00	1,07,12	2,87,83	4,73,95	4,70	0·99	95,87	20·23
TOTAL	87,54	3,33,40	6,82,99	11,03,93	1,51,54	13·72	3,56,92	32·33
1933-34.								
State-managed	6,81	2,50,63	4,94,51	7,51,95	1,70,93	22·73	3,22,17	42·84
Company-managed	66,36	1,12,71	2,65,56	4,44,63	3,81	0·85	77,58	17·45
TOTAL	73,17	3,63,34	7,60,07	11,96,58	1,74,74	14·60	3,99,75	33·40
1934-35.								
State-managed	5,40	2,57,11	5,42,69	8,05,20	2,53,51	31·48	3,48,19	43·24
Company-managed	1,10,90	1,45,65	3,51,58	6,08,13	6,15	1·01	1,40,18	23·05
TOTAL	1,16,30	4,02,76	8,94,27	14,13,33	2,59,66	18·37	4,88,37	34·55
1935-36.								
State-managed	6,37	3,36,88	6,14,15	9,57,40	2,78,11	29·05	4,05,78	42·38
Company-managed	1,23,99	1,32,21	3,43,68	5,99,88	6,76	1·13	1,40,28	23·38
TOTAL	1,30,36	4,69,09	9,57,83	15,57,28	2,84,87	18·29	5,46,06	35·06
1936-37.								
State-managed	5,31	2,58,65	5,33,26	7,97,22	*3,29,44	41·32	3,17,91	39·88
Company-managed	1,18,12	1,18,13	3,30,41	5,66,66	28,32	5·00	1,10,46	19·49
TOTAL	1,23,43	3,76,78	8,63,67	13,63,88	3,57,76	26·23	4,28,37	30·69
1937-38.								
State-managed	37	3,22,00	5,46,75	8,69,12	†3,83,53	44·13	3,06,99	35·32
Company-managed	1,24,71	1,45,30	3,61,52	6,31,53	7,71	1·22	1,34,37	21·27
TOTAL	1,25,08	4,67,30	9,08,27	15,00,65	3,91,24	26·07	4,41,36	29·41
1938-39.								
State-managed	10	3,42,55	5,95,06	9,37,71	‡3,76,15	40·11	3,49,16	37·24
Company-managed	1,55,80	1,52,93	4,33,72	7,42,45	8,39	1·13	1,47,96	19·93
TOTAL	1,55,90	4,95,48	10,28,78	16,80,16	3,84,54	22·89	4,97,12	29·59
1939-40.								
State-managed	**1,88**	**3,43,57**	**6,81,30**	**10,26,75**	**§4,69,32**	**45·72**	**3,90,79**	**38·07**
Company-managed	**1,37,34**	**1,59,96**	**4,42,80**	**7,40,10**	**28,68**	**3·87**	**1,71,35**	**23·15**
TOTAL	**1,39,22**	**5,03,53**	**11,24,10**	**17,66,85**	**4,98,00**	**28·19**	**5,62,14**	**31·82**

* Purchases to the value of Rs. 97,198 for the Chief Mining Engineer, Railway Board, Rs. 5,043 for the Central Publicity Bureau, Indian State Railways, and Rs. 251 for the Railway Clearing Accounts Office made through the Indian Stores Department during 1936-37 are omitted from this figure.

† Purchases to the value of Rs. 5,51,611 for Chief Mining Engineer, Railway Board, Rs. 9,001 for the Central Publicity Bureau, Indian State Railways, and Rs. 413 for the Railway Clearing Accounts Office made through the Indian Stores Department during 1937-38 are omitted from this figure.

‡ Purchases to the value of Rs. 7,33,851 for the Chief Mining Engineer, Railway Board, Rs. 3,191 for the Central Publicity Bureau (Indian State Railways) and Rs. 563 for the Railway Clearing Accounts Office are omitted from this figure.

§ Excludes purchases to the value of Rs. 7,60,558 for the Chief Mining Engineer, Railway Board, Rs. 8,679 for the Central Publicity Bureau (Indian State Railways) and Rs. 2,52 for the Railway Clearing Accounts Office.

It will be seen that the total value of indigenous stores purchased by the State-managed railways during the year under review exceeded that for the previous year by about 86 lakhs, and its percentage to the total value of all stores purchased by those railways increased from 63·46 in 1938-39 to 66·36 in 1939-40. The value of stores purchased by State-managed railways through the Indian Stores Department increased during the year by Rs. 93·17 lakhs, due chiefly to increased prices and purchase of reserve stocks.

In the case of Company-managed railways, the value of stores imported direct declined from Rs. 155·80 lakhs in 1938-39 to Rs. 137·34 lakhs in 1939-40 and the value of purchases made through the Indian Stores Department has shown a considerable increase over that for the previous year. As in 1936-37, the increase was due to Company-managed railways purchasing wheels and axles for wagons through the Indian Stores Department.

87. Purchases of stores by railways through the Indian Stores Department.—The total value of stores purchased by all railways through the agency of the Indian Stores Department during the year under review amounted to Rs. 5,05,69,402, of which Rs. 34,61,306 represented the value of textiles and leather and Rs. 4,71,08,096 the value of engineering, hardware and miscellaneous stores. The following more important items of railway stores were added during the year to the list of items the purchase of which by the State-managed railways through the Indian Stores Department is obligatory :—

Plant—refrigerating and air-conditioning—excluding that required for the rolling stock.

Engines—fire, steam or manual.

Engines—steam, portable or semi-portable, with or without hoisting gear and crane jib—and fittings.

All chemicals, excepting pharmaceutical.

Standard steel windows and doors.

Gas-making apparatus.

Surface and underground coal mining machinery and plant.

Rail motors—petrol.

Washers, steel, spring.

88. Air-conditioned coaches.—The air-conditioned services on the Bombay, Baroda and Central India, East Indian and Great Indian Peninsula Railways continued to be well patronised and greatly appreciated by the travelling public. Seven air-conditioned coaches on the North Western Railway for service on the Lahore-Karachi and Peshawar-Bombay mails and four additional air-conditioned coaches on the Bombay, Baroda and Central India Railway, were under construction for service during 1940-41.

89. Cost of maintenance and supply of locomotive power and cost of maintenance and operation of carriage and wagon stock.—The results obtained during the year under review and the thirteen previous years in regard to the cost of maintenance and supply of locomotive power under the three major heads of accounts (running repairs, workshop repairs and operating expenses) and also of the cost of maintenance and operation of carriage and wagon stock per 1,000 gross ton-miles, for both broad and metre gauges of the Class I Railways in India, are reproduced in graphic form on the two following pages.

90. Central Standards Office for Railways.

90.1. Civil Engineering Branch.—During the year under review, the Civil Engineering Branch of the Central Standards Office standardized and issued the following drawings :—

Bridges—

(i) Reinforced concrete pipe culverts broad gauge and metre gauge M.L. standard of $1\frac{1}{4}$ feet, $1\frac{1}{2}$ feet, $1\frac{3}{4}$ feet, 2 feet, $2\frac{1}{4}$ feet, $2\frac{1}{2}$ feet, $2\frac{3}{4}$ feet, 3 feet, $3\frac{3}{4}$ feet and 4 feet diameters.

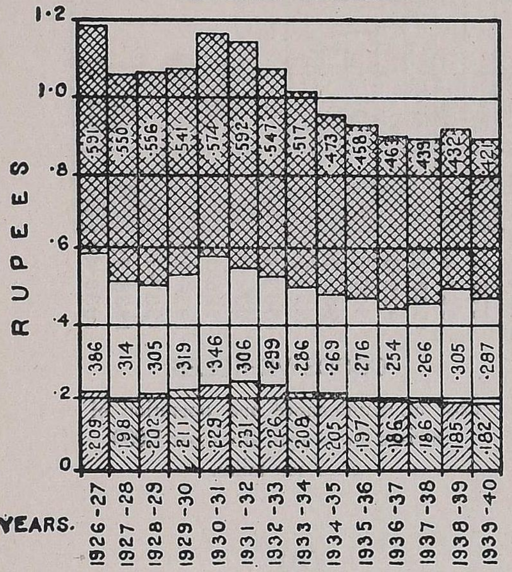
Running repairs shown thus

Workshop repairs shown thus

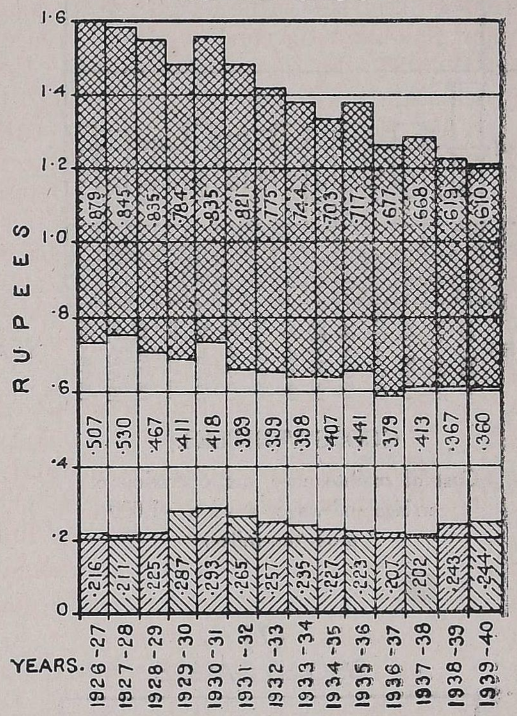
Operating expenses shown thus

COST OF MAINTENANCE AND SUPPLY OF LOCOMOTIVE POWER PER 1,000 GROSS TON-MILES.

(1)
BROAD GAUGE.

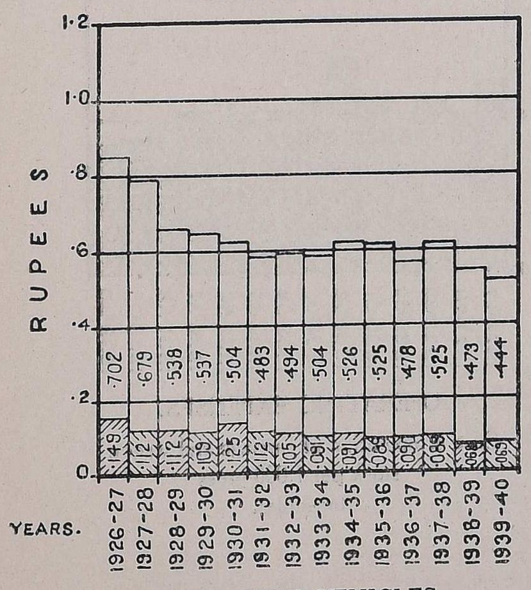


(2)
METRE GAUGE.



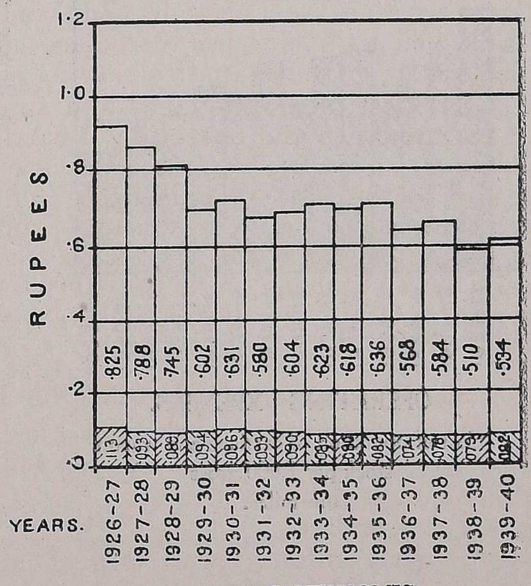
COST OF MAINTENANCE AND OPERATION OF CARRIAGE AND WAGON STOCK PER 1,000 GROSS TON-MILES.

(3)
BROAD GAUGE.



COACHING VEHICLES.

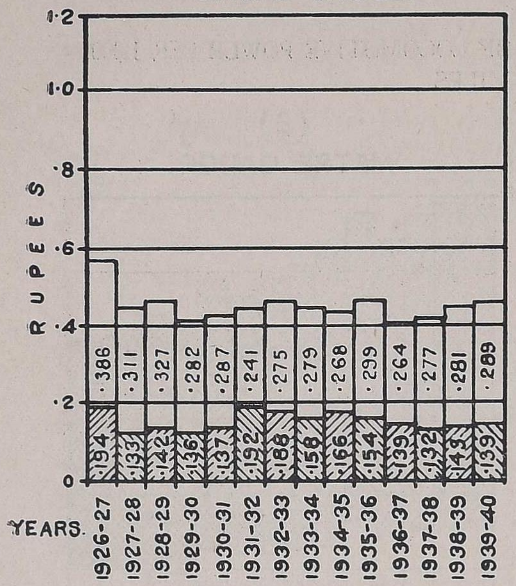
(4)
METRE GAUGE.



COACHING VEHICLES.

(5)

BROAD GAUGE.

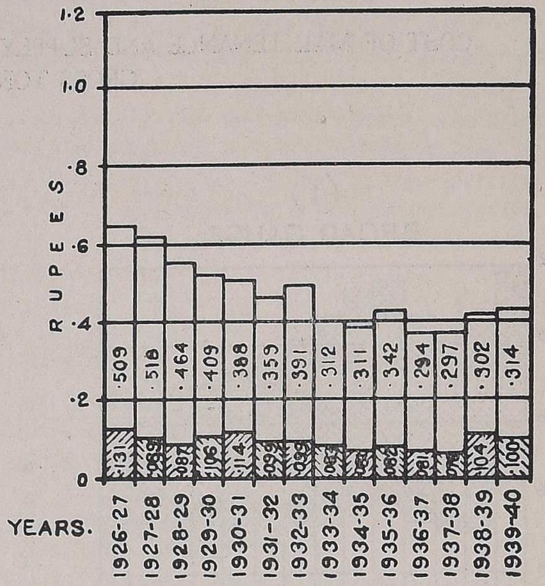


GOODS VEHICLES.

Cost of maintenance and operation of carriage and wagon stock per 1,000 gross ton-miles.

(6)

METRE GAUGE.

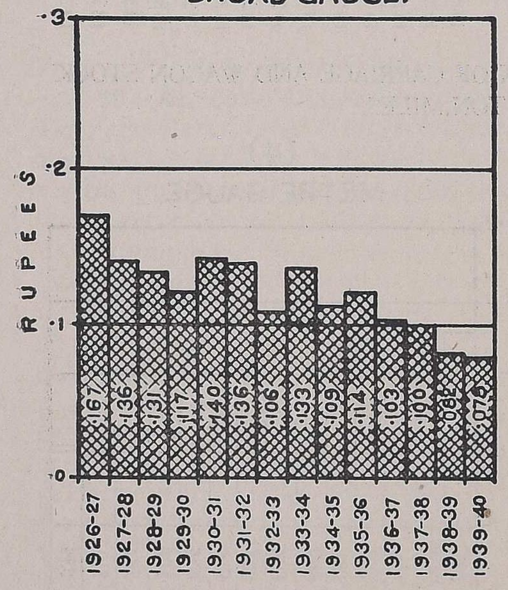


GOODS VEHICLES.

Cost of maintenance and operation of carriage and wagon stock per 1,000 gross ton-miles.

(7)

BROAD GAUGE.

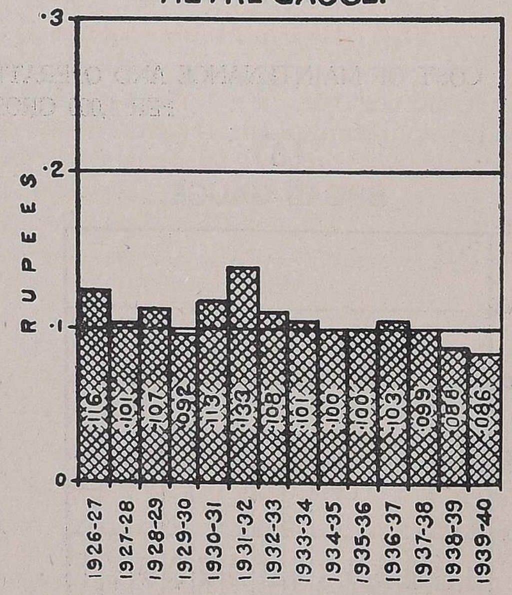


OPERATING EXPENSES.

Cost of operation of carriage and wagon stock per 1,000 gross ton-miles.

(8)

METRE GAUGE.



OPERATING EXPENSES.

Cost of operation of carriage and wagon stock per 1,000 gross ton-miles.

(ii) Reinforced slab top broad gauge M.L. standard for 12 feet clear span (*a*) for single track (twin slab type), (*b*) for multiple tracks, and (*c*) alternative with small width units.

Roofs and sheds—

(i) Roofs over 47 feet, 54 feet and 61 feet wide passenger platforms—broad gauge.

(ii) Roofs over 24 feet, 47 feet, 50 feet, 54 feet and 60 feet 8 inches wide passenger platforms—metre gauge.

Signalling and Interlocking—

(i) Facing point lock.

(ii) Split stretcher bar for facing point lock—broad gauge.

(iii) Doll signal base.

(iv) Detail drawings of certain parts of the signal and point indicator lamps.

In addition to the above the following drawings were prepared by the Central Standards Office and issued as **tentative standards** :—

Permanent-way—

(i) Insulated switch tie plate for broad gauge and metre gauge.

(ii) Insulated crossing tie plate for broad gauge.

(iii) 1 in 6 diamond crossing for broad gauge 75R.

(iv) Leading stretcher bar for 1 in 8½ double slips for broad gauge.

(v) Reinforced concrete sleepers for siding.

Miscellaneous—

(i) 75 feet diameter turntable for broad gauge M.L. standard.

91. Mechanical Engineering Branch.

91.1. Mechanical Drawing Office.—Consequent on modifications to drawings arising out of the recommendations of the Carriage and Wagon and Electrical Standards Committees, the Mechanical Drawing Office had to bring up-to-date master sets of part drawing relating to I.R.S. wagons, underframes, automatic vacuum brake and coaching bodies.

During the year under review, approximately 90 new wagon, underframe and carriage and wagon part drawings were prepared and issued. The Consulting Engineers continued to send contractors' drawings relating to the details of the " WL ", " WM ", " WU ", " WV " and " WW " series of locomotives for the approval of the Chief Controller of Standardization.

The Consulting Engineers' report on connecting and coupling rod failures was placed before the Locomotive Standards Committee and new drawings for revised designs of connecting and coupling rods were prepared. The final designs are still under reference with the Consulting Engineers.

The services of the Mechanical Drawing Office were fully utilised by the officer on special duty, in connection with experimental fittings required for the investigation of the heated bearing problem.

A design for a new suburban tank engine was prepared.

Drawings were prepared of modifications to the XG type engine showing the wheel arrangement altered from 0-8-0 to 2-8-2.

Layouts of broad and metre gauge lower class coaching stock were prepared showing minimum accommodation, amenities and equipment to be provided in accordance with the orders of the Railway Board.

A design for a new high capacity open goods wagon was prepared.

Particular specifications were drafted for the XT type locomotives to be built at Ajmer for the North Western and Great Indian Peninsula Railways and also for the underframes and wagons included in the combined call for all railways' requirements for 1940-41.

Pacific Locomotive Committee Report.—A meeting of the Chief Engineers and Chief Mechanical Engineers of Class I Railways was convened in June 1939 to consider the recommendations contained in the Pacific Locomotive Committee Report so far as maintenance, operation and design of Pacific type locomotives are concerned. Subjects requiring further action arising out of the minutes of this meeting were placed before the Locomotive Standards Committee in December 1939. In this connection approximately 60 full size drawings were prepared in the Mechanical Drawing Office to give effect to the recommendations of the Pacific Locomotive Committee. Full instructions and schedules of materials were prepared for guidance of railways in carrying out modifications required to I.R.S. broad gauge 4-6-2 type engines in accordance with Pacific Locomotive Committee's requirements.

92. Specification Branch.

92.1. Specifications.—During the year under review new Indian Railway Standard Specifications for the following items were issued :—

(i) Reinforced concrete pipes for use as culverts.
(ii) double wire signalling ropes, 6 × 19 (provisional).
(iii) double wire interlocking frame.
(iv) hydrants, fire and water.
(v) starting and control gear, push button or master switch operated, fully interlocked, for D.C. motors up to 650 volts.
(vi) starting and control gear, push button or master switch operated, for A.C. polyphase induction motors up to 650 volts.
(vii) flood light projectors for lighting of railway yards.
(viii) static condensers for the improvement of power factor.
(ix) train lighting belting for railways.
(x) puddled iron sheets.
(xi) flanging and pressing quality steel plates.

Furthermore, 22 I.R.S. Specifications were revised and re-issued while 20 were modified through the issue of corrigendum or addendum slips. 19 Indian Stores Department standard specifications and 5 British standard specifications were adopted for use on Indian railways. Draft I.R.S. specifications for various other items, the chief amongst which is one for timber, came under consideration and will be issued in due course.

As an emergency measure and with a view to encouraging indigenous manufacture, certain provisions in some I.R.S. specifications have been relaxed. In a few cases the purchase of materials to American and other specifications has been permitted as a temporary emergency measure.

93. Standardization Committees.—Details of the work performed by the various Standardization Committees during the year are given below :—

93.1. Locomotive Standards Committee.—The membership of the Committee which formerly was confined only to the four State Railways with representatives of two Company-managed lines, was extended to all the principal Company-managed lines. A meeting of the committee was held in December 1939. At this meeting, the committee discussed the recommendations of the Pacific Locomotive Committee, and the following are some of the other important items dealt with :—

(*a*) Design of suburban tank engine.
(*b*) Changes in design to improve cylinder performance.

(c) Locomotive maintenance practice in respect of—
expanding boiler tubes,
adjusting axlebox wedges,
pressing-in coupling rod bushes,
side-play in axleboxes.

(d) Condemning thickness of stud-fastened tyres.

(e) Design of connecting and coupling rods.

(f) Design of firebox tube plates.

(g) Staying of fireboxes.

(h) Design of horn clips.

(i) Results of trials of experimental fittings were considered and sixteen trials were closed. In six instances, fittings that had been under trial were adopted as standard.

93.2. Carriage and Wagon Standards Committee.—A meeting of the Carriage and Wagon Standards Committee was held in March 1940 when results of trials of experimental fittings were considered. The following are amongst the other important subjects dealt with :—

(a) Schedule of minimum requirements for upper and lower class carriages.

(b) Standard construction drawings for Broad and Metre Gauge coaching stock.

(c) Improvement in design of Metre Gauge brake vans.

(d) Pump layout for tank wagons.

(e) Lip type axlebox bearings.

(f) Riding of 4-wheeled coaching stock.

(g) Weather-proof doors for wagon stock.

(h) Standardization of principal dimensions of train-lighting dynamos.

93.3. Bridge Standards Committee.—The Committee met in January 1940. The following are some of the important subjects dealt with :—

(a) Consideration of the revised draft Bridge Rules confined to specification of loads.

(b) Drafting of a Steel Bridge Code.

(c) Framing of rules for strengthening members under stress by welding.

(d) Specification of working stresses for welded structures not subject to impact or pulsating loads.

(e) Additional field test for reinforced concrete work, for inclusion in the Reinforced Concrete Code and Plain Concrete Code.

(f) Revision of the Code for the design of piers and abutments.

(g) Consideration of designs of different types of abutments prepared by the Central Standards Office.

(h) Dr. Nichol's report on impact tests on all-steel track on bridges.

(i) Designs of R.C. box culverts.

(j) Necessity for a deflection formula in the Bridge Rules.

93.4. Track Standards Committee.—The Committee met in December 1939 and made recommendations on the following :—

(a) the designs of—
(i) insulated rail joints,
(ii) insulated gauge tie plates,
(iii) broad gauge cross-overs with steel sleepers,

(iv) leading stretcher bars for 1 in $8\frac{1}{2}$ double slips for broad gauge and metre gauge,

(v) claw bar Y-38,

(vi) reinforced concrete sleeper suitable for sidings prepared by the Central Standards Office,

(*b*) revised proposal of the Central Standards Office for machining the nose of crossings,

(*c*) the Bengal Nagpur Railway's proposal for using fishing fit distance blocks opposite the nose of a crossing,

(*d*) North Western Railway's report on staggered rail joints and desirability of making similar trials on other railways,

(*e*) the desirability of issuing drawings of steel sleeper layouts where one turnout butts on another,

(*f*) standardization of standard narrow gauge steel trough sleepers,

(*g*) standardization of CST 9 type cast iron sleepers,

(*h*) the use of rigid sleepers on black cotton soil and other weak soils,

(*i*) Pacific Locomotive Committee's remarks concerning the design of sleepers and other track components,

(*j*) Bengal Nagpur Railway's proposal regarding the possibility of reducing the weight of the light riding trolley, and

(*k*) proposal of the Central Standards Office for increasing the bearing area of wing rails close to a crossing by facing them with special high alloy steels by welding.

93.5. Signalling and Interlocking Standards Committee.—The Committee met in November 1939 and made recommendations on the following :—

(*a*) draft of Part I of the Signalling Manual,

(*b*) drawings of rotary detectors prepared by the Central Standards Office,

(*c*) revival of signal slide and unit detector drawings,

(*d*) Bengal Nagpur Railway's proposal to modify the spectacle S. 2087,

(*e*) proposals for cancellation or modification of certain existing standard drawings,

(*f*) the designs of—

(i) lock stretchers used on metre gauge railways,

(ii) insulated rail joints,

(iii) signal and point indicator lamps,

(iv) insulated metre gauge stretcher bars.

(v) insulated gauge tie plates, and

(vi) leading stretcher bar for 1 in $8\frac{1}{2}$ double slips,

(*g*) the desirability of increasing the size of standard signal drawings, and

(*h*) draft I.R.S. Specification S. 10-39.

93.6. Standing Committee on Standards and Specifications for Indian Railways.—The Standing Committee on Standards and Specifications for Indian Railways met in New Delhi in February 1940 and considered the question of the preparation of specifications for 12 items outstanding from the previous meeting. The committee also considered 5 draft I.R.S. specifications and recommended consideration of 54 fresh items for standardization Of these 13 have been taken up.

The committee also made recommendations on the following items and subjects :—

(i) paulins,

(ii) lamps—signal—hand,

(iii) crockery, cutlery and glassware,

(iv) the revision of Indian Railway Standard Conditions of contract Nos. A1, A2 and A3, and

(v) interchange of results of practical tests on materials.

93.7. Electrical Standards Committee.—The Electrical Standards Committee met in Simla in August 1939 and considered 6 draft Indian Stores Department specifications, 4 draft I.R.S. specifications and 2 B.S. specifications for adoption for use on Indian Railways.

The Committee also made recommendations on the minimum standards of illumination to be provided for the internal lighting of coaching stock and the following minimum standards have been accepted by the Railway Board :—

Class of Coach.	Foot candles.	Watts per sq. ft.
First	2·5	1·20
Second	2·0	0·95
Inter	1·5	0·72
Third	1·0	0·50

The committee also considered the following subjects :—

(i) Dynamos for train lighting—revision of I.R.S. specification No. E1-37 (correction No. 1 of November 1938).

(ii) Length of dynamo suspension link on metre and broad gauge when on safety chains.

(iii) Axle pulley for dynamos—metre gauge.

(iv) Length of cable for combined fuse and junction box.

(v) Five-core flexible cable for inter vehicle couplers.

(vi) Water raising apparatus.

(vii) Carriage fans (I.R.S. Specification No. E4-34 has since been revised and re-issued as No. E4-40).

(viii) Metal cover porcelain cut-outs (3 Amps.) for train lighting.

(ix) Rectangular section wires for effecting repairs to electrical machine windings, and the question of developing standard gauges for the same.

94. Research and Development.

94.1. Mechanical Branch.—The following are some of the important items dealt with during the year :—

(a) *Paints.*—During the year under review the sub-committee appointed to examine the report of the Paint Technologist referred to in the last year's report met twice. They submitted two comprehensive reports suggesting ways in which new specifications for paints and painters' stores should be drafted and recommended detailed revision of the existing specifications. These new and revised specifications for paints have been prepared under the technical guidance of the Government Test House and the Industrial Research Bureau (Indian Stores Department), in collaboration with the representatives of the Association of Paint Manufacturers in India. These are to be published in a book form during 1940-41. It is expected that the adoption of these specifications will result in considerable improvement in the quality of paints purchased by the Indian Railways.

The other subjects covered by the reports of the Sub-Committee are formulæ of mixtures for paints, methods of tests including evaluation of results obtained in practice, workshop practice and the schedule of painting for coaching and goods stock and other ancillary recommendations.

(b) *Heated bearing problem.*—The report of the officer on special duty investigating this problem was received towards the end of the year and examination thereof was commenced. The report contains a number of recommendations relating to design of axleboxes, methods of lubrication, etc.

(c) *Wagon door leakage.*—Further trials on the Bengal Nagpur Railway wagon fitted with their new type of door (similar to those carried out by the North Western Railway) were placed before the Carriage and Wagon Standards Committee who recommended that further tests should be conducted by the North Western Railway on one each of the all-welded wagons manufactured by Messrs. Burn and Jessop and Company.

(d) *Corrosion tests. Experiments with " Tiscor " steel.*—The number of wagons with panel plates of " Tiscor " (a corrosion resisting steel for which Messrs. The Tata Iron and Steel Company have manufacturing rights in India) placed in service as an experimental measure, had not during the year under review been in traffic for a sufficiently long period to enable conclusions to be reached.

(e) *Oscillation trials of Pacific type locomotives.*—Oscillation trials continued throughout the year, but it was not till November that the officers on special duty were in a position to carry out the first series of tests with XA engines on the Great Indian Peninsula Railway modified in accordance with the Pacific Locomotive Committee's recommendations. 86 such tests were made at lower ranges of speed up to 40 miles per hour running through turnouts.

120 further tests with the same engines were made on straight and curved track on the Bhusaval-Nagpur section main line on black cotton soil at higher speeds ranging between 50 and 70 miles per hour.

Further tests were also made on B.E.S.A. 4-6-0 engines as well as on XP class Pacific locomotives.

On completion of this work, a series of tests with XC class engines and B.E.S.A. 4-6-0 engines were made on the Bombay, Baroda and Central India Railway main line, the speeds ranging between 50 and 70 miles per hour.

In all the tests of modified Pacific and B.E.S.A. locomotives, records of oscillation and bogie and coupled wheel flange pressures were obtained by means of special electrical apparatus designed for the purpose. At the same time careful observation was made of the track to see if any distortions occurred at places where high flange pressures were recorded.

Experiments were also made to ascertain the lateral thrust required to cause the bogie wheels to climb the rail and it was established that an ample factor of safety exists.

The results of all these tests have been forwarded to the Consulting Engineers for transmission to the members of the Pacific Locomotive Committee.

94.2. Civil Engineering Branch—

(a) *Stresses in track.*—As the research officers of the Central Standards Office have been engaged since their return from leave on investigations into the oscillation of locomotives, track research has had to be confined to some measurements of lateral distortion which have been carried out during high speed test runs of locomotives both under dry weather and monsoon conditions. Opportunity has also been taken during the tests to measure the elastic constant of the track under various weights of locomotives. Some work has also been done on the development of a high speed electrical accelerometer with which, it is hoped, it will be possible to ascertain the deflection of rails between sleepers.

(b) *Heat-treatment of crossings.*—Twelve heat-treated chrome steel crossings were laid on East Indian Railway in 1937 and twelve heat-treated carbon steel crossings were laid in 1939. In both cases the heat-treated crossings have shown superiority over the untreated crossings. It is noticed that heat-treated carbon steel crossings show less wear than the heat-treated chrome steel crossings.

(c) *Duplex joint sleepers.*—These cast iron rail free joint sleepers are now being tried on many railways in India. The reports so far received are very satisfactory.

(d) *Guard rails for level crossings.*—Guard rails have been designed for level crossings laid with steel trough sleepers and consist of a rolled flat held rigidly to the running rail. Reports so far received are promising.

(e) *Rail expansion joints.*—About 20 pairs of rail expansion joints to different designs are being tried on 4 different railways. The Madras and Southern Mahratta Railway is going to instal 72 pairs of mitred rail joints. Reports generally show that at these joints the wear and noise are reduced.

(f) *Heat-treated fishplates.*—Heat-treated fishplates on two and a half mile section of 90-lb. rail are being tried under fast and heavy traffic on the East Indian Railway. Along with them similar untreated fishplates were laid at the same time under exactly similar service conditions. Though it is too early to draw any definite conclusion, report shows that the heat-treated fishplates are beginning to show their superiority over the untreated ones.

(g) *Staggered rail joints.*—In order to confirm that the improved running and reduced maintenance experienced with staggered rail joints is not due merely to the extra sleeper which it is necessary to insert, the North Western Railway has been asked to lay a section of track with the additional sleeper but with square joints. This section should preferably be in continuation of the section already laid with staggered joints.

(h) *Spring crossings.*—One 1 in 12 spring crossing for broad gauge 90R section is being tried in the Howrah yard on the down line. Trials, when this crossing was traversed in the facing directions at restricted speeds upto 25 miles, have been successful. Further trials with 1 in $8\frac{1}{2}$ spring crossings are going to be made on the emergency crossovers on double line sections of the East Indian Railway and Eastern Bengal Railway.

(i) *Improvements to track on bridges.*—Rubber pads under rails on all-steel track are giving satisfactory results. Results with composition pads under bridge timbers are inconclusive due probably to the deterioration of the material in transit. Trials with all-steel track on bridges show several advantages such as reduction of corrosion, reduction of impact owing to elimination of track irregularities and rail joints and ultimate economy due to elimination of timber renewals.

(j) *Welded rail joints.*—Experiments in the welding together of rails by the Thermit process have been carried out on the North Western, East Indian and Great Indian Peninsula Railways, over a length of about 2 miles of track on each railway, ordinary fishplate joints being left at intervals of about 120 feet to provide for temperature expansion.

The welded rails have now been in the line for about a year and the experiment appears to be a success in that it has resulted in improved running, but the cost of welding by this method is very high. It is probable that cost of track maintenance will be reduced but no definite information on this point is yet available.

(k) *Corrosion tests on different kinds of steel.*—Corrosion tests on different kinds of steel plates, namely of B. S. Mild, Tiscrom High Tensile, Tiscor and Copper bearing steel, manufactured in India by Tatas, in the " as rolled " condition and in the " pickled and polished " condition, are being carried out on the South Indian Railway. The plates are exposed on the Pamban Viaduct. Observations regarding loss of weight after 1 year's exposure are not very conclusive. It is, however, clear that loss of weight due to corrosion in the plates in the " as rolled " condition is more than in the plates in the " pickled and polished " condition. The tests are being continued.

(l) *Experiments with metal sprayed plates and with plates coated with cement wash.*—A number of metal sprayed plates and plates coated with cement wash have been exposed on the Chinna Creek Bridge, Karachi, since 1938 to see how far the protective coating is suitable for resisting corrosion. In the case of plates with cement wash, the plates are first given 2 coats of red lead. When the second coat is still tacky fine sand is thrown or blown against it. Two coats of 1 : 3 cement sand wash are afterwards applied by means of a brush. Reports indicate that these plates and the metal sprayed plates are still free from corrosion.

(m) *Experiment with " limit spanner " for prevention of creep.*—The Assam Bengal Railway is trying on its main line section a new method of preventing creep by using " limit spanners " which enable the fishbolts to be tightened to a definite tension so as to ensure uniformity of the grip on the fishplates, and by regular lubrication of the fishplates by a suitable lubricant. Although the creep has not entirely been eliminated, the results achieved are very encouraging. The use of limit spanners has been extended to the entire railway system and the experiment is being continued.

CHAPTER VIII.

STAFF.

95. Number of staff.—The total number of employees (permanent and temporary) on all Indian Railways and in the office of the Railway Board and other offices subordinate thereto (excluding staff employed on construction) at the end of the year 1939-40 was 708,541 as compared with 701,307 at the end of 1938-39. The total route mileage at the end of the year was 41,156. The following table shows the number of employees by communities on the 31st March 1939 and 1940. A similar statement showing details by railways is given as Appendix C of Volume II of this Report.

Date.	Europeans.	Indians.										Grand Total.
		Hindus.		Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Other communities.	Total.		
		Hindus other than depressed classes.	Depressed classes.									
31st March 1939*	2,508	397,417	104,211	155,389	12,973	7,795	17,771	1,514	1,729	698,799		701,307
31st March 1940	**2,326**	**399,647**	**106,490**	**157,500**	**13,106**	**8,072**	**18,041**	**1,505**	**1,854**	**706,215**		**708,541**

NOTE.—These figures exclude the staff on loan from the Indian Audit and Accounts Service (Deptt.).
* Revised figures due to changes made by the railway administrations in the figures published last year.

96. Cost of staff.—The following statement shows the number and cost of all staff, superior and subordinate (including labourers), permanent and temporary, open line and construction, employed on Class I Railways during the years 1938-39 and 1939-40. Contractors' labour is not included.

Railway Systems.	Year.	Number of staff on 31st March.							Cost of staff.			
		Open line.			Construction.			Gazetted Officers on loan from the Indian Audit and Accounts Service (Deptt.).	Gazetted Officers.	Non-gazetted employees.	Total.	Total including staff on loan from the Indian Audit and Accounts Service (Deptt.).
		Gazetted Officers.	Non-gazetted employees.	Total.	Gazetted Officers.	Non-gazetted employees.	Total.					
1	2	3	4	5	6	7	8	9	10	11	12	13
									Rs.	Rs.	Rs.	Rs.
Assam Bengal	1939	63*	16,551*	16,614	..	..	..	..	10,49,492	69,61,187	80,10,679	80,10,679
	1940	**60**	**16,396**	**16,456**	..	..	..	..	**10,05,818**	**69,30,497**	**79,36,315**	**79,36,315**
Bengal and North-Western.	1939	72	28,390	28,462	2	84	86	..	10,86,843	75,26,728	86,13,571	86,13,571
	1940	**71**	**28,179**	**28,250**	**2**	**341**	**343**	..	**11,08,186**	**76,01,458**	**87,09,644**	**87,09,644**
Bengal Nagpur	1939	194	69,610	69,804	..	..	..	..	32,63,201	3,28,83,902	3,61,47,103	3,61,47,103
	1940	**194**	**68,638**	**68,832**	..	..	..	..	**33,23,589**	**3,37,65,107**	**3,70,88,696**	**3,70,88,696**
Bombay, Baroda and Central India.	1939	173	62,659	62,832	1	5	6	..	29,69,958	3,84,60,260	4,14,30,218	4,14,30,218
	1940	**176**	**62,584**	**62,760**	..	**1**	**1**	..	**30,34,534**	**3,53,03,326**	**3,83,37,860**	**3,83,37,860**

* For explanations please see notes at the end of the statement.

Railway Systems.	Year.	NUMBER OF STAFF ON 31ST MARCH. Open line. Gazetted Officers.	Open line. Non-gazetted employees.	Open line. TOTAL.	Construction. Gazetted Officers.	Construction. Non-gazetted employees.	Construction. TOTAL.	Gazetted Officers on loan from the Indian Audit and Accounts Service (Deptt.).	COST OF STAFF. Gazetted Officers.	Non-gazetted employees.	TOTAL.	Total including staff on loan from the Indian Audit and Accounts Service (Deptt.).
1	2	3	4	5	6	7	8	9	10	11	12	13
									Rs.	Rs.	Rs.	Rs.
Eastern Bengal	1939	117*	54,072	54,189*	..	..	..	1	21,02,733	2,48,56,136*	2,69,58,869*	2,70,22,481*
	1940	121	52,842	52,963	..	..	..	2	22,66,229	2,52,50,135	2,75,16,364	2,75,72,813
East Indian	1939	*285	130,235*	*130,520	..	..	..	5	46,87,335*	6,11,33,531*	6,58,20,866*	6,59,19,298*
	1940	277	133,293	133,570	..	46	46	5	50,90,285	6,13,20,399	6,64,10,684	6,65,08,159
Great Indian Peninsula.	1939	216	77,491	77,707	..	..	..	4	39,14,237*	4,37,29,801*	4,76,44,038*	4,76,67,701*
	1940	209	78,608	78,817	..	..	..	1	43,05,159	4,38,28,303	4,81,33,462	4,81,47,485
Jodhpur	1939	27*	8,016*	*8,043	*2	483	485*	1	3,97,236*	28,46,320*	*32,43,556	32,79,072*
	1940	26	7,891	7,917	1	775	776	1	3,87,988	29,78,191	33,66,179	33,96,536
Madras and Southern Mahratta.	1939	134*	47,039*	47,173*	..	..	..	..	25,05,964*	2,31,28,597*	2,56,34,561*	2,56,34,561*
	1940	136	46,525	46,661	..	..	..	..	23,99,574	2,32,22,746	2,56,22,320	2,56,22,320
Mysore State†	1939	32	3,731	3,763	1	19	20	..	1,71,496	14,79,148	16,50,644	16,50,644
	1940	31	7,403	7,434	1	22	23	..	2,06,300	26,06,641	28,12,941	28,12,941
Nizam's State	1939	91	16,348	16,439	7	223	230	..	11,45,357	63,74,128	75,19,485	75,19,485
	1940	88	16,368	16,456	6	216	222	..	12,49,163	67,06,194	79,55,357	79,55,357
North Western	1939	280	101,295*	*101,575	4	*292	296*	4	47,31,387*	5,89,50,144*	6,36,81,531*	6,37,46,996*
	1940	268	102,334	102,602	4	1,199	1,203	5	46,19,648	5,83,42,465	6,29,62,113	6,30,58,168
Rohilkund and Kumaon.	1939	15	5,987	6,002	..	..	..	..	*2,41,224	*15,72,115	*18,13,339	*18,13,339
	1940	14	6,125	6,139	..	..	..	..	1,88,369	15,93,737	17,82,106	17,82,106
South Indian	1939	134	36,419	36,553	1	253	254	..	18,35,193	1,66,87,795	1,85,22,988	1,85,22,988
	1940	127	37,536	37,663	..	61	61	..	19,16,388	1,67,04,567	1,86,20,955	1,86,20,955
Railway Clearing Accounts Office.	1939	5	1,357	1,362	..	..	..	2	50,378	15,64,635	16,15,013	16,61,097
	1940	4	1,403	1,407	..	..	..	2	53,357	15,58,467	16,11,824	16,49,160
TOTAL‡	1939*	1,838	659,200	661,038	18	1,359	1,377	17	3,01,52,034	32,81,54,427	35,83,06,461	35,86,39,233
	1940	1,802	666,125	667,927	14	2,661	2,675	16	3,11,54,587	32,77,12,233	5,88,66,820	35,91,98,515

NOTE.—The figures of cost up to 1938-39 include the salaries and wages of staff, bonus contributions to the provident fund, gratuities, overtime allowances and all other allowances which are of the nature of extra pay and which are not granted to meet some definite expense incurred in the performance of duty, such as travelling allowance ; but from 1939-40 travelling and compensatory allowances are also included.

* Represents revised figures for 1938-39 due to changes made by the railway administrations in the figures published last year.

† Figures for 1938-39 exclude the labour staff.

‡ Figures for 1938-39 exclude the labour staff of Mysore Railway.

Distribution of cost of Gazetted Officers and Subordinate Staff of the Railway Clearing Accounts Office.

Railway.	Gazetted Officers.		Non-gazetted employees.		Total.		Total including staff on loan from Indian Audit and Accounts (Departments).	
	1938-39.	1939-40.	1938-39.	1939-40.	1938-39.	1939-40.	1938-39.	1939-40.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. North Western	13,437	14,179	4,17,311	4,14,139	4,30,748	4,28,318	4,43,038	4,38,239
2. East Indian	13,437	14,179	4,17,311	4,14,139	4,30,748	4,28,318	4,43,038	4,38,239
3. Eastern Bengal	5,039	5,317	1,56,491	1,55,302	1,61,530	1,60,619	1,66,140	1,64,340
4. Great Indian Peninsula.	10,076	10,634	3,12,983	3,10,604	3,23,059	3,21,238	3,32,279	3,28,679
5. Bombay, Baroda and Central India.	8,389	9,048	2,60,539	2,64,283	2,68,928	2,73,331	2,76,602	2,79,663
TOTAL	50,378	53,357	15,64,635	15,58,467	16,15,013	16,11,824	16,61,097	16,49,160

A comparison of the figures for 1939-40 with those for 1938-39 shows that the total number of staff employed on open line on 31st March 1940 increased by 6,889 as compared with that on 31st March 1939, the number of staff on loan from the Indian Audit and Accounts Service decreased by one only while the number of construction staff rose by 1,298. The total cost of staff including those on loan from the Indian Audit and Accounts Service during 1939-40 increased by Rs. 5,59,282 as compared with 1938-39.

There was an increase in both the number and cost of staff on the East Indian, Great Indian Peninsula, Jodhpur, Mysore, His Exalted Highness the Nizam's State and South Indian Railways and a decrease on the Assam Bengal, Bombay, Baroda and Central India and Madras and Southern Mahratta Railways. There was a decrease in the number but an increase in cost on the Bengal and North-Western, Bengal Nagpur and Eastern Bengal Railways. On the North Western and Rohilkund and Kumaon Railways and Railway Clearing Accounts Office there was an increase in number but a decrease in cost.

On the East Indian Railway the increase in number and cost is chiefly due to the employment of temporary staff under the Engineering Department and the inclusion of figures relating to travelling allowance in the figures for the year under review in accordance with the revised instructions of the Railway Board.

On the Great Indian Peninsula Railway also the increase in number and cost was mainly due to the engagement of extra gangs in the Engineering Department.

On the Jodhpur Railway the increase in number and cost is chiefly due to employment of more labour for completion of a project and more repairs carried out to track, staff quarters and rolling stock.

On the Eastern Bengal Railway the decrease in number has been mainly in the Engineering Department and was due to the employment of a smaller number of temporary staff in connection with open line revenue and capital works. The increase in cost is mainly attributable to the restoration of the grant of compensatory allowance to officers stationed in Calcutta with retrospective effect.

On the Nizam's State Railway the increase in cost is due to additional wages having been paid for the difference between old and new wage periods consequent on the introduction of a revised programme for the payment of wages.

On the Bengal Nagpur Railway the increase in cost is due to (*a*) provision for reconciliation of land plans with Provincial Governments, (*b*) shed repairs to meet traffic requirements and (*c*) piece-work wages on increased outturn and heavier repairs in workshops.

On the North Western Railway the decrease in cost is generally due to the employment of new staff on revised scales of pay.

The variations under other railways were small and call for no remarks.

96.1. Indianisation—State-managed Railways.—(a) *Superior Services.*—11 appointments were made to the Superior Railway Services both by direct recruitment and promotion. Details are given below :—

State-managed Railways—Direct recruitment.

Department.	Europeans.	Vacancies filled by — Indians. — Hindus. Other than Depressed Classes.	Hindus. Depressed Classes.	Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Other communities.	Total
Agency . . .	..	..	..	..	..	..	..	..	..	..
Engineering . . .	..	1	..	..	..	1	1	..	..	3
Accounts . . .	..	2	..	..	..	1	..	..	..	3
Transportation (Traffic) and Commercial.	..	1	..	..	..	..	..	..	..	1
Transportation (Power) and Mechanical Engineering.	1	..	..	..	..	..	..	..	..	..
Stores	..	..	..	..	..	..	..	..	..	..
Other Departments .	..	..	..	..	..	..	..	..	..	..
Total .	1	4	..	..	..	2	1	..	..	7

Percentage { Europeans . . . 12·5
Indians . . . 87·5

The percentage of Europeans was less than 25. Against the requirements of previous years and the year under review three officers were to be recruited from the United Kingdom to the Indian Railway Service of Engineers, two to the Mechanical Engineering and Transportation (Power) Department and one to the Transportation (Traffic) and Commercial Department but no suitable candidates were forthcoming from that country, except one, who came out to India in the Mechanical Engineering and Transportation (Power) Department. The remaining vacancies were, therefore, carried forward.

As regards Indian recruitment the percentages were :—

57·1 Hindus.

28·6 Sikhs.

14·3 Indian Christians.

With regard to Muslims, in the Engineering Department against one post reserved for Muslims only one qualified Muslim candidate was recommended by the Federal Public Service Commission and he failed in the

medical test. One vacancy was reserved for a Muslim in the Signal Engineering Department but the vacancy was not filled as no suitable Muslim candidate was recommended by the Federal Public Service Commission.

As there was only one vacancy in the Transportation (Traffic) and Commercial Department it was filled by a candidate in order of merit in accordance with the rotation order prescribed by the Government of India.

Three vacancies in the Accounts Department were also filled in order of merit. The first two were according to the rotation order and the last one of these was taken against an unreserved vacancy for 1940-41.

Endeavours will be made to make up the deficiency in the recruitment of Muslims in the Superior State Railway Services during 1940-41.

State-managed Railways—Promotions.

DEPARTMENT.	VACANCIES FILLED BY									
	EUROPEANS.	INDIANS.								
		Hindus.		Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Other communities.	TOTAL.
		Other than Depressed Classes.	Depressed Classes.							
Agency	..	..	..	..	..	..	..	..	..	..
Engineering	1	..	..	..	..	..	..	..	..	..
Accounts	..	..	..	..	..	..	..	..	..	..
Transportation (Traffic) and Commercial.	1	..	..	..	..	..	..	..	..	..
Transportation (Power) and Mechanical Engineering.	..	..	..	..	..	..	..	..	..	..
Stores	..	..	..	..	..	..	..	..	..	..
Other Departments	..	1	..	..	..	..	..	..	..	1
TOTAL	2	1	..	..	..	..	..	..	..	1

Of a total of three officers promoted to the Superior Services, two were Europeans and one was a Hindu.

(b) *Lower Gazetted Service.*—29 promotions were made to the Lower Gazetted Service in the various departments. 8 went to Europeans and 21 to Indians of whom 13 were Hindus, one Muslim, six Anglo-Indians and Domiciled Europeans, and one Parsi. Figures by departments were as follows :—

DEPARTMENT.	VACANCIES FILLED BY									
	EUROPEANS.	INDIANS.								
		Hindus.		Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Other communities.	TOTAL.
		Other than Depressed Classes.	Depressed Classes.							
Agency	..	..	..	..	..	..	..	..	..	..
Engineering	4	6	..	1	2	..	..	..	..	9
Accounts	1	3	..	..	..	..	..	..	..	3
Transportation (Traffic) and Commercial.	1	2	..	..	2	..	..	..	..	4
Transportation (Power) and Mechanical Engineering.	2	1	..	..	2	..	..	..	..	3
Stores	..	..	..	..	..	..	..	..	..	..
Other Departments	..	1	..	..	..	..	..	1	..	2
TOTAL	8	13	..	1	6	..	..	1	..	21

96.2. Company-managed railways.—The following tables give a summary of the recruitment made to the Superior Services on Company-managed Class I Railways (excluding His Exalted Highness the Nizam's State, Jodhpur and Mysore State Railways) during the year under review. A detailed statement by individual railways will be found in Appendix CV (*a*) of Volume II of this report.

Company-managed Railways—Direct recruitment.

Department.	Vacancies filled by									
	Europeans.	Indians.								
		Hindus.		Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Other communities.	Total.
		Other than Depressed Classes.	Depressed Classes.							
Agency . . .	..	..	..	..	..	..	..	..	..	..
Accounts . . .	..	..	..	1	..	..	..	..	..	1
Engineering . . .	1	2	..	2	..	..	..	..	..	4
Transportation (Traffic) and Commercial.	..	2	..	1	..	..	2	..	..	5
Transportation (Power) and Mechanical Engineering.	..	3	..	..	..	..	..	..	..	3
Stores	..	..	..	..	..	..	..	..	..	..
Other Departments .	1	1	..	..	..	..	..	1	..	2
TOTAL .	2	8	..	4	..	..	2	1	..	15

Percentage { Europeans . . . 11·8
Indians . . . 88·2

Company-managed Railways—Promotion.

Department.	Vacancies filled by									
	Europeans.	Indians.								
		Hindus.		Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Other communities.	Total.
		Other than Depressed Classes.	Depressed Classes.							
Agency . . .	1	1	..	..	..	..	..	..	..	1
Accounts . . .	..	..	..	..	..	..	..	..	..	..
Engineering . . .	..	2	..	..	1	..	..	..	..	3
Transportation (Traffic) and Commercial.	..	3	..	1	2	..	..	..	..	6
Transportation (Power) and Mechanical Engineering.	2	1	..	..	2	..	..	..	..	3
Stores	..	2	..	..	..	..	..	..	..	2
Other Departments .	1	..	..	..	..	..	..	..	..	..
TOTAL .	4	9	..	1	5	..	..	..	..	15

It will be observed from the figures of direct recruitment that during the year under review the total number of appointments made by direct recruitment to the Superior Services on Company-managed railways was 17 of which 2 went to Europeans and 15 to Indians of whom 8 were Hindus, 4 Muslims, 2 Indian Christians and 1 Parsi. The ratio of Indian to European recruitment was 88·2 to 11·8.

The percentage of European recruitment was less than **25**.

The percentage of Indian recruitment in the principal Departments was :—

	Per cent.
Engineering	80·0
Transportation (Traffic) and Commercial	100·0
Transportation (Power) and Mechanical Engineering	100·0

Among Indian recruits the proportionate recruitment from each community was as shown below :—

	Per cent.
Hindus	53·3
Muslims	26·7
Indian Christians	13·3
Parsis	6·7

The over-all direct Indian recruitment to Superior Railway Services on the State and Company-managed Railways, taken together, give percentages as follows :—

	Per cent.
Hindus	54·5
Muslims	18·2
Sikhs	9·1
Indian Christians	13·6
Parsis	4·6

97. Review of the progress made since 1925.—The statements on the following pages will throw further light on the progress made in Indianisation and in the recruitment of the various communities both on State-managed and Company-managed Railways since 1925, as reflected in the relative strength of Europeans and Indians belonging to the various communities. Part I relates to superior staff and Part II to subordinate staff on scales of pay rising to Rs. 250 and over.

PART I.

Statement of gazetted officers on State-managed Railways and Officers of corresponding rank on Company-managed (Class I) Railways (excluding H. E. H. the Nizam's State, Jodhpur and Mysore State Railways) on the 1st April 1925, 31st March 1939 and 31st March 1940.

1st April 1925.

Name of Railway.	Europeans.	Indians. Hindus. Other than Depressed classes.	Indians. Hindus. Depressed classes.†	Indians. Muslims.	Indians. Anglo-Indians.§	Indians. Sikhs.§	Indians. Indian Christians.§	Indians. Parsis.§	Indians. Other communities.§	Indians. Total.	Total number on the Railway (column 2 *plus* 11).
1	2	3	4	5	6	7	8	9	10	11	12
State-managed Railways.											
Eastern Bengal	79	31	..	3	..	..	..	..	12	46	125
East Indian	227	49	..	12	..	..	..	..	26	87	314
Great Indian Peninsula	175	18	..	5	..	..	..	..	23	46	221
North Western	192	60	..	13	..	..	..	..	28	101	293
Railway Board and miscellaneous offices.	59	8	..	3	..	..	..	..	14	25	84
TOTAL	732	166	..	36	..	..	..	..	103	305	1,037
Company-managed Railways.											
Assam Bengal	52	6	..	1	..	..	..	..	2	9	61
Bengal Nagpur	170	27	..	5	..	..	..	..	19	51	221
Bengal and North-Western	55	3	..	1	..	..	..	..	..	4	59
Bombay, Baroda and Central India	159	14	..	..	..	..	..	..	21	35	194
Madras and Southern Mahratta	122	15	..	1	..	..	..	..	6	22	144
Rohilkund and Kumaon	12	1	..	..	..	..	..	..	..	1	13
South Indian	93	17	..	1	..	..	..	..	3	21	114
TOTAL	663	83	..	9	..	..	..	..	51	143	806
GRAND TOTAL	1,395	249	..	45	..	..	..	..	154	448	1,843

31st March 1939.

Name of Railway.	Europeans.	Indians. Hindus. Other than Depressed classes.	Indians. Hindus. Depressed classes.	Indians. Muslims.	Indians. Anglo-Indians and Domiciled Europeans.	Indians. Sikhs.	Indians. Indian Christians.	Indians. Parsis.	Indians. Other communities.	Indians. Total.	Total number on the Railway (column 13 *plus* 22).
1	13	14	15	16	17	18	19	20	21	22	23
State-managed Railways.											
Eastern Bengal	42	53*	..	6	15	..*	1	..	..	75*	117*
East Indian	117*	109	..	13	37	4	2	3	..	168	285*
Great Indian Peninsula	119	48	..	14	18	..	11	6	..	97	216
North Western	123*	85*	..	33*	22	17*	4	..	..	161*	284
Railway Board and miscellaneous offices.	41*	19*	..	4*	6*	2	2*	..	..	33*	74*
TOTAL	442	314*	..	70	98*	23*	20*	9	..	534*	976*
Company-managed Railways.											
Assam Bengal	31	19	..	6*	5	1	..	1	..	32*	63*
Bengal Nagpur	95	48	..	15	30	3	1	2	..	99	194
Bengal and North-Western	52	8	..	8	2	3	1	..	..	22	74
Bombay, Baroda and Central India	96	41	..	16	5	1	4	10	1	78	174
Madras and Southern Mahratta	70	41*	..	2*	8	2	5*	6	..	64*	134*
Rohilkund and Kumaon	7	3	..	2	2	1	..	..	..	8	15
South Indian	56	59	..	4	12	..	4	..	..	79	135
TOTAL	407	219*	..	53*	64	11	15*	19	1	382*	789*
GRAND TOTAL	849	533*	..	123*	162*	34*	35*	28	1	916*	1,765*

31st March 1940.

Name of Railway.	Europeans.	Indians. Hindus. Other than Depressed classes.	Indians. Hindus. Depressed classes.	Indians. Muslims.	Indians. Anglo-Indians and Domiciled Europeans.	Indians. Sikhs.	Indians. Indian Christians.	Indians. Parsis.	Indians. Other communities.	Indians. Total.	Total number on the Railway (column 24 *plus* 33).
1	24	25	26	27	28	29	30	31	32	33	34
State-managed Railways.											
Eastern Bengal	39	58	..	6	17	..	1	..	..	82	121
East Indian	106	107	..	15	38	5	3	3	..	171	277
Great Indian Peninsula	106	51	..	15	18	..	11	8	..	103	209
North Western	106	90	..	35	22	15	4	..	..	166	272
Railway Board and miscellaneous offices.	45	21	..	3	6	2	1	..	..	33	78
TOTAL	402	327	..	74	101	22	20	11	..	555	957
Company-managed Railways.											
Assam Bengal	28	19	..	6	5	1	..	1	..	32	60
Bengal Nagpur	92	50	..	15	31	3	1	2	..	102	194
Bengal and North-Western	51	8	..	8	1	4	1	..	..	22	73
Bombay, Baroda and Central India	92	45	..	18	3	1	5	11	1	84	176
Madras and Southern Mahratta	70	42	..	3	7	2	6	6	..	66	136
Rohilkund and Kumaon	6	3	..	2	3	..	..	..	..	8	14
South Indian	51	56	..	6	11	..	3	..	..	76	127
TOTAL	390	223	..	58	61	11	16	20	1	390	780
GRAND TOTAL	792	550	..	132	162	33	36	31	1	945	1,737

Statement showing the percentages of the relative strength of Europeans and Indians of various communities.

Community			1925.§	1939.	1940.
Europeans		State-managed Railways	70·59	45·29*	42·01
		Company-managed Railways.	82·26	51·58*	50·00
		TOTAL	75·69	48·10*	45·60
Indians: Hindus	Other than Depressed classes.	State-managed Railways	16·01	32·17*	34·17
		Company-managed Railways.	10·30	27·76*	28·59
		TOTAL	13·51	30·20*	31·66
	Depressed classes.	State-managed Railways	†	..	..
		Company-managed Railways.	†	..	..
		TOTAL	†	..	..
Muslims		State-managed Railways	3·47	7·17*	7·73
		Company-managed Railways.	1·12	6·72*	7·44
		TOTAL	2·44	6·97*	7·60
Anglo-Indians and Domiciled Europeans.		State-managed Railways	§	10·04*	10·55
		Company-managed Railways.	§	8·11*	7·82
		TOTAL	§	9·18*	9·33
Indians—*contd.* Sikhs		State-managed Railways	§	2·36*	2·30
		Company-managed Railways.	§	1·39*	1·41
		TOTAL	§	1·93*	1·90
Indian Christians		State-managed Railways	§	2·05*	2·09
		Company-managed Railways.	§	1·90*	2·05
		TOTAL	§	1·98*	2·07
Parsis		State-managed Railways	§	0·92	1·15
		Company-managed Railways.	§	2·41*	2·56
		TOTAL	§	1·58*	1·78
Other communities		State-managed Railways	§9·93	..	..
		Company-managed Railways.	§6·32	0·13	0·13
		TOTAL	§8·36	0·06	0·06
TOTAL		State-managed Railways	29·41	54·71*	57·99
		Company-managed Railways.	17·74	48·42*	50·00
		TOTAL	24·31	51·90*	54·40

* Revised figures. † Depressed classes were included under 'Other than depressed classes' in 1925. § Anglo-Indians, Sikhs, Parsis and Indian Christians included in 'Other communities' in 1925.

PART II.

Statement of subordinates on scales of pay rising to Rs. 250 per mensem and over on Class I Railways (excluding H. E. H. the Nizam's State, Jodhpur and Mysore State Railways), on the 1st April 1925, 31st March 1939 and 31st March 1940.

Name of Railway.	1st April 1925. Europeans.	Indians. Hindus. Other than Depressed classes.	‡Depressed classes.	Muslims.	†Anglo-Indians.	†Sikhs.	†Indian Christians.	†Parsis.	†Other communities.	Total.	Total number on the Railway (column 2 plus 11).
1	2	3	4	5	6	7	8	9	10	11	12
State-managed Railways.											
Eastern Bengal	143	106	..	5	..	..	..	..	163	274	417
East Indian	859	300	..	25	..	..	..	..	789	1,114	1,973
Great Indian Peninsula	286	125	..	29	..	..	..	..	803	957	1,243
North Western	401	328	..	123	..	..	..	..	378	829	1,230
Railway Board and miscellaneous offices.	§	§	§	§	§	§	§	§	§	§	§
TOTAL	1,689	859	..	182	..	..	..	..	2,133	3,174	4,863
Company-managed Railways.											
Assam Bengal	22	23	..	4	..	..	..	..	46	73	95
Bengal Nagpur	333	140	..	13	..	..	..	..	403	556	889
Bengal and North-Western	31	15	..	2	..	..	..	..	59	76	107
Bombay, Baroda and Central India	155	253	..	25	..	..	..	..	506	784	939
Madras and Southern Mahratta	85	31	..	1	..	..	..	..	173	205	290
Rohilkund and Kumaon	6	5	..	1	..	..	..	..	13	19	25
South Indian	63	73	..	2	..	..	..	..	158	233	296
TOTAL	695	540	..	48	..	..	..	..	1,358	1,946	2,641
GRAND TOTAL	2,384	1,399	..	230	..	..	..	..	3,491	5,120	7,504

Name of Railway.	31st March 1939. Europeans.	Indians. Hindus. Other than Depressed classes.	Depressed classes.	Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Other communities.	Total.	Total number on the Railway (column 13 plus 22).
1	13	14	15	16	17	18	19	20	21	22	23
State-managed Railways.											
Eastern Bengal	49	191	..	12	142	8	3	..	4	360	409
East Indian	280*	525*	2	58*	966*	14*	11*	3	5	1,584*	1,864*
Great Indian Peninsula	120	242	2	35	627	10	92	32	24	1,064	1,184
North Western	199*	389*	..	237*	334*	108*	27*	22	6*	1,123*	1,322*
Railway Board and miscellaneous offices.	6*	167*	1	29*	26*	15*	6	..	..	244*	250*
TOTAL	654*	1,514*	5	371*	2,095*	155*	139*	57	39*	4,375*	5,029*
Company-managed Railways.											
Assam Bengal	13	39	1	5*	44	4	3	..	..	96*	109*
Bengal Nagpur	67	252	..	28	463	16	19	3	..	781	848
Bengal and North-Western	15	27	1	8	66	..	..	..	1	103	118
Bombay, Baroda and Central India	140	337	1	30	267	1	40	99	27	802	942
Madras and Southern Mahratta	46	63*	..	3	152*	3	6	4	1	232*	278*
Rohilkund and Kumaon	3	3	..	2	14	..	..	..	..	19	22
South Indian	24	83	..	10	126	..	13	..	..	232	256
TOTAL	308	804*	3	86*	1,132*	24	81	106	29*	2,265*	2,573*
GRAND TOTAL	962*	2,318*	8	457*	3,227*	179*	220*	163	68*	6,640*	7,602*

Name of Railway.	31st March 1940. Europeans.	Indians. Hindus. Other than Depressed classes.	Depressed classes.	Muslims.	Anglo-Indians and Domiciled Europeans.	Sikhs.	Indian Christians.	Parsis.	Other communities.	Total.	Total number on the Railway (column 24 plus 33).
1	24	25	26	27	28	29	30	31	32	33	34
State-managed Railways.											
Eastern Bengal	45	194	..	11	146	6	3	..	4	364	409
East Indian	262	568	2	72	912	12	9	3	7	1,585	1,847
Great Indian Peninsula	110	251	1	37	641	13	87	41	26	1,097	1,207
North Western	199	384	..	248	335	98	20	22	10	1,117	1,316
Railway Board and miscellaneous offices.	6	178	1	30	26	13	5	..	..	253	259
TOTAL	622	1,575	4	398	2,060	142	124	66	47	4,416	5,038
Company-managed Railways.											
Assam Bengal	12	39	1	5	46	5	3	..	..	99	111
Bengal Nagpur	67	247	2	24	466	17	32	3	..	791	858
Bengal and North-Western	16	31	1	7	66	..	..	..	1	106	122
Bombay, Baroda and Central India	130	336	..	31	280	2	32	95	33	809	939
Madras and Southern Mahratta	43	64	..	2	144	2	5	4	1	222	265
Rohilkund and Kumaon	3	3	..	3	14	..	..	..	..	20	23
South Indian	21	89	1	10	117	..	16	..	..	233	254
TOTAL	292	809	5	82	1,133	26	88	102	35	2,280	2,572
GRAND TOTAL	914	2,384	9	480	3,193	168	212	168	82	6,696	7,610

Statement showing the percentages of the relative strength of Europeans and Indians of various communities.

			1925.	1939.	1940.
Europeans		State-managed Railways	34·73	13·00*	12·35
		Company-managed Railways.	26·32	11·97*	11·35
		TOTAL	31·77	12·65	12·01
Indians	Hindus: Other than Depressed classes.	State-managed Railways	17·67	30·11*	31·26
		Company-managed Railways.	20·44	31·25*	31·45
		TOTAL	18·64	30·49*	31·33
	Hindus: Depressed classes.	State-managed Railways	‡	0·10	0·08
		Company-managed Railways.	‡	0·12	0·20
		TOTAL	‡	0·11*	0·12
	Muslims	State-managed Railways	3·74	7·38*	7·90
		Company-managed Railways.	1·82	3·34*	3·19
		TOTAL	3·07	6·01*	6·30
	Anglo-Indians and Domiciled Europeans.	State-managed Railways	†	41·66*	40·89
		Company-managed Railways.	†	43·99*	44·05
		TOTAL	†	42·45*	41·96
Indians—*contd.*	Sikhs	State-managed Railways	†	3·08*	2·82
		Company-managed Railways.	†	0·93	1·01
		TOTAL	†	2·36*	2·21
	Indian Christians	State-managed Railways	†	2·76*	2·46
		Company-managed Railways.	†	3·15*	3·42
		TOTAL	†	2·89*	2·78
	Parsis	State-managed Railways	†	1·13	1·31
		Company-managed Railways.	†	4·12*	3·97
		TOTAL	†	2·14*	2·21
	Other communities	State-managed Railways	43·86†	0·78*	0·93
		Company-managed Railways.	51·42†	1·13*	1·36
		TOTAL	46·52†	0·90*	1·08
	TOTAL	State-managed Railways	65·27	87·00*	87·65
		Company-managed Railways.	73·68	88·03*	88·65
		TOTAL	68·23	87·35	87·99

* Revised figures. † Anglo-Indians, Sikhs, Parsis and Indian Christians included in 'Other communities' in 1925. ‡ 'Depressed classes' were included under 'Other than depressed classes' in 1925. § Not available.

It will be observed that the Indian element in the superior services has risen from 29·41 per cent. on State-managed and 17·74 per cent. on Company-managed Railways in 1925 to 57·99 per cent. on State-managed and 50 per cent. on Company-managed Railways in 1940. Among Indians the percentages by communities in the years 1925 and 1940 were as shown below :—

—	State-managed. Percentages. 1925.	State-managed. Percentages. 1940.	Company-managed. Percentages. 1925.	Company-managed. Percentages. 1940.
Hindus — Other than depressed classes	16·01†	34·17	10·30†	28·59
Hindus — Depressed classes . .	†	..	†	..
Muslims	3·47	7·73	1·12	7·44
Anglo-Indians and Domiciled Europeans.	*	10·55	*	7·82
Sikhs	*	2·30	*	1·41
Indian Christians	*	2·09	*	2·05
Parsis	*	1·15	*	2·56
Other Communities. . . .	9·93*	..	6·32*	0·13

* Anglo-Indians, Sikhs, Parsis and Indian Christians included under " Other communities " in 1925.
† Depressed classes were included among Hindus in 1925.

Turning to the subordinate staff on scales of pay rising to Rs. 250 per mensem and over, the corresponding figures are as under :—

—	State-managed. Percentages. 1925.	State-managed. Percentages. 1940.	Company-managed. Percentages. 1925.	Company-managed. Percentages. 1940.
Europeans	34·73	12·35	26·32	11·35
Indians—				
Hindus — Other than depressed classes.	17·67†	31·26	20·44†	31·45
Hindus — Depressed classes .	†	0·08	†	0·20
Muslims	3·74	7·90	1·82	3·19
Anglo-Indians and Domiciled Europeans.	*	40·89	*	44·05
Sikhs	*	2·82	*	1·01
Indian Christians . . .	*	2·46	*	3·42
Parsis	*	1·31	*	3·97
Other Communities . . .	43·86*	0·93	51·42*	1·36
Total Indians .	65·27	87·65	73·68	88·65

* Anglo-Indians, Sikhs, Parsis and Indian Christians included under " Other communities " in 1925.
† Not available separately.

98. Representation of minority communities in subordinate railway services.—The figures given in Appendix C-V (*b*) of Volume II of this report (which corresponds with Appendix G-II, Volume I, of previous years) show by communities, the number and percentage of subordinate staff (excluding labourers and inferior servants), recruited to both permanent and temporary posts on State and Company-managed Railways during the year 1939-40. The following figures show the overall percentages on State and Company-managed Railways during the six years ending with 1939-40.

—	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
(i) *Combined percentage figures of permanent and temporary recruitment.*						
Europeans	..	0·19	0·2	0·1	0·1	0·2
Hindus	65·20	57·09	54·1	55·0	56·0	57·5
Muslims	17·45	28·50	31·2	29·9	29·9	29·2
Anglo-Indians and Domiciled Europeans.	12·13	8·33	8·7	9·2	7·6	7·5
Sikhs	1·03	1·70	2·1	2·3	2·2	2·1
Indian Christians	2·95 } 4·64	3·49 } 5·51	3·1 } 5·5	2·8 } 5·6	3·4 } 6·1	3·0 } 5·4
Parsis	0·66	0·32	0·3	0·5	0·5	0·3
Other communities	0·58	0·38	0·3	0·2	0·3	0·2
(ii) *Percentage figures of permanent recruitment.*						
Europeans	..	..	0·5	0·4	0·3	0·2
Hindus	..	..	55·6	56·0	54·4	58·0
Muslims	..	..	26·4	26·5	27·1	24·8
Anglo-Indians and Domiciled Europeans.	..	..	10·7	10·9	10·3	9·5
Sikhs	..	..	1·2	1·8	2·2	1·8
Indian Christians	..	..	4·5 } 6·2	3·6 } 6·0	4·2 } 7·3	4·5 } 7·1
Parsis	..	..	0·5	0·6	0·9	0·8
Other communities	..	..	0·6	0·2	0·6	0·4
(iii) *Percentage figures of temporary recruitment.*						
Europeans	..	..	..	0·1	..	0·2
Hindus	..	..	53·0	54·4	56·9	57·0
Muslims	..	..	34·6	31·8	31·4	31·9
Anglo-Indians and Domiciled Europeans.	..	..	7·4	8·3	6·1	6·3
Sikhs	..	..	2·8	2·5	2·2	2·4
Indian Christians	..	..	2·1 } 5·0	2·4 } 5·3	3·0 } 5·5	2·0 } 4·5
Parsis	..	..	0·1	0·4	0·3	0·1
Other communities	..	..	..	0·1	0·1	0·1

NOTE.—Separate figures for permanent and temporary recruitment by communities for 1934-35 and 1935-36 are not available.

It will be observed from the figures given above that during the year under review direct recruitment to subordinate railway services of the different minority communities for whom percentages have been fixed by the Government of India, was satisfactory, though there are some divergences as between permanent and temporary recruitment. The Anglo-Indian and Domiciled European community for instance obtained 9·5 per cent., against the 8 per cent. fixed, in permanent recruitment, while there was a shortage in temporary recruitment, due to members of this community not offering themselves in sufficient numbers for such appointments. This resulted in bringing down the combined percentage to 7·5.

In December 1939, Mr. Frank D'Souza on vacating the post of Member, Railway Board, was placed on special duty by the Government of India to review the working of the rules and orders relating to the representation of minority communities in the service of the four State-managed Railways. He was required to analyse and review the results already achieved with regard to both gazetted and non-gazetted ranks. The enquiry was not directed towards any revision of the principles already laid down by Government, but to an investigation into the application of these principles in practice, with a view to making, if necessary, recommendations which might facilitate their better enforcement. With Mr. D'Souza was associated Khan Bahadur Z. H. Khan, an officer of the North Western Railway, who was Deputy Director of Establishment in the office of the Railway Board some time ago. Mr. D'Souza had not concluded his investigations at the end of the year under review.

In May 1939, the Government of India, with the approval of the Secretary of State, issued orders reserving in the Superior Railway Services 2·5 per cent. of all vacancies to be filled by direct recruitment for Anglo-Indians and Domiciled Europeans. Along with this, Government also decided that Anglo-Indians and Domiciled Europeans employed in categories of subordinate posts in which they are accorded a special reservation should be given a minimum wage of Rs. 55 per mensem. These orders were brought into force with effect from the 1st April 1939.

99. **Training of Staff.**—**Area Schools.**—(a) *East Indian Railway School of Transportation, Chandausi.*—The activities of the school were extended over those of last year by the addition of refresher courses for junior officers and a promotion course for transportation inspectors. 28 officers and 8 transportation inspectors attended these courses during the year. The details of the number of students, etc., who passed through the school are given in the following figures. There is an increase in the number of students and in gross expenditure but there is a reduction in the expenditure per student.

	1938-39	1939-40
Number of students attending refresher courses	627	**757**
Number of students attending training course	169	**211**
Number of officers attending courses	2	**5**
Total number of students	798	**973**
Total number of student days	30,692	**37,493**
Expenditure	Rs. 59,829	**Rs. 66,548**
Cost per student day	Rs. 1-15	**Rs. 1-12**

(b) *North Western Railway Walton Training School, Lahore Cantonment.*—The activities of the school continued to be of great advantage to the administration in improving the general standard of efficiency. Lectures on civility and politeness to the public and on personnel work formed a part of almost every syllabus. Practical demonstrations of working at a railway station were given to students by taking them to outstations. Experience proved that such visits were a great help to students in assimilating details explained to them in the class and model rooms.

The following figures detail the number of students, etc., who passed through the school, the number being less than in the previous year due

to certain courses having been held in abeyance. Various measures taken made it possible to reduce the cost of the school.

	1938-39	1939-40
Number of students attending refresher courses	513	**485**
Number of students attending special courses	3	**1**
Number of students attending for examination only	132	**152**
Number of students attending training courses	1,225	**967**
Number of officers attending courses .	6	**2**
Total number of students . . .	1,879	**1,607**
Total number of student days . .	85,748	**79,699**
Expenditure	Rs. 2,31,000	**Rs. 1,96,000**
Cost per student day	Rs. 2-11	**Rs. 2-7**

(c) *East Indian Railway Technical School, Jamalpur.*—The school was opened in 1925 with the object of providing facilities for the training of apprentice mechanics and trade apprentices only. At that time it had four classes with a total strength of 172 students on its rolls and four teachers. In 1927 provision was made for the training of special class apprentices with a view to their ultimate appointment to the Electrical Engineering, and to the Mechanical Engineering and Transportation (Power) Departments of the Superior State Railway Services.

A permanent-way section was opened at this school in January 1940. This section affords practical instruction with full size material for apprentices, mates suitable for promotion, mistries and assistant permanent-way inspectors.

The school now contains training facilities for apprentices of and candidates for all Engineering Departments. In addition it imparts training in fuel economy to staff of the Bengal Nagpur, Eastern Bengal and Madras and Southern Mahratta Railways.

At the close of the year under review the school had 14 teachers on its staff, 96 classes were held during the year, out of which 57 involved examinations, the remaining 39 being merely refresher courses.

99.1. Stimulation of interest of staff in their work.—In last year's report, it was stated that railway administrations had not only readily acquiesced with the views expressed by the Indian Railway Enquiry Committee in regard to the desirability of inculcating in the staff greater interest in their work and a more active business outlook, but were also working generally on the lines suggested by the Committee. During the year under review, administrations have continued their endeavours in this direction.

The Madras and Southern Mahratta and South Indian Railways formed in 1938 a section of the Permanent-Way Institute of England, with the aim of developing the interest of staff in a study of the principles and methods adopted by other workers in different countries. Other railways have been asked to consider the possibility of forming such sections in their own areas.

100. Improvements in the service conditions of the staff.—*Provident fund concessions to Inferior Staff.*—The question of extending the provident fund concessions to inferior staff on railways was under the active consideration of the Government of India during the year under review. As a first step in this direction, Government provided a sum of Rs. 12 lakhs for the purpose, in the budget for 1940-41 and asked the Railway Board to settle the best method of utilising this amount. The Railway Board, therefore, arranged for a special meeting with the All-India Railwaymen's Federation in April 1940 to discuss this question and certain other important matters.

101. The Payment of Wages Act.—The correct observance of the Payment of Wages Act on Railways continued to engage the attention of the Railway Board during the year under review. References continued to be received from railway administrations bringing to notice difficulties experienced in complying with certain provisions of the Act, as for example the payment, within the time stipulated under the Act, of loading and unloading charges to railway employees employed at wayside stations. After an examination of the position, instructions were issued laying down a special procedure calculated to secure the expeditious payment of these charges.

A further number of Co-operative Societies were approved, under the Act, by the Central Government, for purposes of deductions from wages on account of the Societies' dues. The question of the issue of an authorisation under the Act, for the same purpose, in respect of certain additional amenities supplied to employees by railway administrations such as stamps on service agreements, cost of watches and uniforms, etc., also received consideration.

Railway administrations were asked to review the working of the Act and report to the Railway Board (i) whether the Act has resulted in any substantial benefit to the workers; (ii) whether there has been any compensating advantage to the Railway by way of improvement in the railway workers' lot; and (iii) the extent of increase in work and any difficulties in complying with the provisions of the Act. They were also asked to indicate broadly whether practical experience has shown the desirability of modifying the Act in any respect. By the end of the period under review these reports were still awaited from a few railway administrations.

Towards the close of the year, administrations were asked to make a careful review of their existing procedure in dealing with disciplinary cases involving fines or reductions in pay so as to ensure that such action did not tend to defeat the intentions underlying the Act. Further, railway administrations adopting "Conduct marks systems" were asked to take special steps to see that the operation of such systems did not lead to possible evasion of the Act. The reports which were asked for from railway administrations in this connection will be dealt with in the next year's report.

102. Welfare.—(i) *Assistance to railway employees for the education of their children.*—The salient features of the rules issued provisionally in September 1930 for the grant of assistance from railway revenues to railway employees towards the education of their children were detailed in the report for 1930-31. In last year's report, it was mentioned that the maximum limit of Rs. 40 per mensem originally laid down in these rules for the assistance payable to any one employee has been raised to Rs. 60 per mensem as a measure of further relief. During the year under review no further amendments were made to the rules.

(ii) *Staff Benefit Funds.*—These have been constituted on a number of principal railways and are continuing to function. As in previous years, grants were made from these funds to provide amenities and relieve distress among non-gazetted railway employees and their families, the funds being distributed by committees of the workers themselves.

(iii) *Railway Sports.*—The twelfth annual Inter-Railway Athletic Tournament was held in the Irwin Amphitheatre at New Delhi on the 15th and 16th March 1940. The Bombay, Baroda and Central India, Bikaner, Eastern Bengal, East Indian, Great Indian Peninsula, Jodhpur, Madras and Southern Mahratta, His Exalted Highness the Nizam's State, North Western and South Indian Railways, and the Railway Board entered teams. The tournament was won by the North Western Railway for the twelfth year in succession, the Madras and Southern Mahratta Railway being the runners-up. The Junior Railways Challenge Cup was won by the Bikaner State Railway. One All-India and Railway record was broken.

A hockey tournament was held at New Delhi from the 7th to 13th March 1940; the competitors being the Bombay, Baroda and Central India, East Indian, Great Indian Peninsula, Madras and Southern Mahratta, His Exalted Highness the Nizam's State and North Western Railways and the Railway Board. The Great Indian Peninsula Railway beat the Madras and Southern Mahratta Railway in the final.

A tennis tournament was also held for the first time for a number of years, in which the earlier rounds of the competition were played locally and the semi-finals and final in Delhi. The semi-finalists were the East Indian, South Indian and North Western, and Great Indian Peninsula Railways and the finals were played between the East Indian and North Western Railways, the East Indian Railway winning.

The Inter-Railway Officers Golf tournament was won by the North Western Railway.

103. Meetings with All-India Railwaymen's Federation.—During the period under review, the Railway Board met deputations from the All-India Railwaymen's Federation on the following occasions:—

(i) The seventeenth half-yearly meeting held on the 19th May 1939.

(ii) A special meeting between Chief Commissioner and Financial Commissioner of Railways held on the 20th July 1939.

(iii) The eighteenth half-yearly meeting on the 27th and 28th November 1939.

(iv) A special meeting with the Financial Commissioner of Railways held on the 1st February 1940.

(v) An informal meeting between the Railway Board and the President and General Secretary of the All-India Railwaymen's Federation held on the 2nd February 1940.

2. The following were the principal subjects discussed at the seventeenth half-yearly meeting held on the 19th May 1939:—

(i) Pass rules.

(ii) Extension of provident fund membership to inferior staff.

(iii) Accumulation of leave for inferior staff on State-managed Railways.

(iv) Extension of the Hours of Employment Regulations.

(v) Joint Standing Machinery as recommended by the Whitley Commission.

Owing to the absence of their President, these subjects were not fully discussed by the Federation, who requested that they may therefore be given a special meeting. The Chief Commissioner and Financial Commissioner of Railways accordingly met the Federation, on the 20th July 1939, at Bombay, during their monsoon tours when these subjects were further discussed. At this meeting the Chief Commissioner indicated to the Federation the extent to which the Railway Board found it possible to accede to the requests put forward by the Federation. The Government of India were for instance prepared to restore some of the pass concessions and also to provide in the State Railway Leave Rules that in the case of inferior and daily-rated staff leave up to a limit of 30 days might be accumulated.

3. The following subjects were discussed at the eighteenth half-yearly meeting held on the 27th and 28th November 1939:—

(i) Scale of pay for journeymen on the North Western Railway.

(ii) Application of the new scales of pay.

(iii) Re-employment of staff retrenched since 1931.

(iv) Alleged infringement of the provisions of the Payment of Wages Act, 1936.

(v) Facilities to be granted to recognised Trade Unions; and

(vi) Grievances of Accounts Staff.

These subjects were discussed fully and the Chief Commissioner of Railways agreed to examine some of the points raised in respect of each.

At the special meeting between the Financial Commissioner of Railways and the All-India Railwaymen's Federation held on the 1st February 1940, the grievances of Accounts Staff on State-managed Railways were discussed such as, the position of clerks transferred to the Railway Clearing Accounts Office, and the grant of compensatory allowances, etc.

At the informal meeting which took place on the 2nd February 1940, the President of the Federation explained the Federation's views in regard to the conditions of railway labour owing to increase in prices since the outbreak of the war.

Towards the close of the year under review, the Railway Board announced that at the request of the All-India Railwaymen's Federation they had agreed to arrange for a special meeting to be held in April 1940, at which the extension of the provident fund benefits was to be discussed and that a representation from the Federation regarding increased prices since the war would also be considered.

104. Recognition of Unions by railway administrations.—In paragraph 111 of last year's report it is stated that instructions were to be issued to Railways in connection with the " Conditions precedent to the recognition of a Union by a Railway Administration ". Early in the year under review, the conditions precedent to the recognition of a Union were issued to the Railways with instructions to the General Managers of State-managed Railways that these " Conditions " should be regarded generally, as supplementary to the Rules for the recognition of Associations of Industrial Employees (including Railway Employees) of the Government of India and that so long as a Union of non-gazetted Railway servants had rules not repugnant to those embodied in these " Conditions ", recognition should be accorded unless there were other valid reasons for declining to do so. General Managers of State-managed Railways were also instructed that if any Unions already recognised by them had rules repugnant to those contained in the " Conditions " the Unions should be given sufficient time, in which to make the necessary alterations in their rules. A copy of these instructions was sent to the Agents and General Managers of Company-managed Railways with the remark that the adoption of these " Conditions " in the case of Unions operating on their Railways might be considered.

105. Dearness Allowance.—During the first few months of the war, there was a tendency for retail prices to rise sharply and by December 1939 the cost of living indices for the 15 towns in the country which maintain such figures had advanced by an average of 10 per cent. in excess of the figures for the preceding August. This caused a demand for an increase in wages on various railways and in February 1940 the Board had an informal discussion with the President, All-India Railwaymen's Federation. Subsequently it was decided to discuss this matter with a deputation from the Federation and this meeting took place just after the close of the year under review. In the meantime, however, the retail prices fell considerably and in March 1940 were on an average, according to the cost of living indices, not more than 5 per cent. above the figures for August 1939.

106. Railway staff and the war.—On the outbreak of war a variety of problems presented themselves in connection with railway operation and the extent to which Indian Railways could assist in the general war effort. These, as far as the staff are concerned, may be summarised as follows :—

(i) *Release of individual officers for technical war work.*—Individual officers began to be released for various war duties in the

autumn of 1939. Some went to technical recruiting work, others to Ordnance Factories while a number of Reservists returned to Military and Naval duties. All R. E. officers in railway employ below the rank of Lt.-Col. were also returned to military duty in the first few months of war.

(ii) *Release of non-gazetted staff*.—Skilled labour and a certain amount of supervisory staff being required for munitions work, volunteers who, it was arranged would be temporarily transferred as required were called for. Special terms were formulated for those of State-managed Railways which were also applied in the case of Company-managed Railway personnel. These terms inclue a lien on the worker's railway appointment with consideration for promotion under the " next below " rule. It also became evident that with the prospect of railway workshops being asked to undertake munitions work, plans would have to be formulated for a rapid expansion in skilled and supervisory personnel in the shops and this had been examined in some detail before the end of the year under review.

(iii) *Financial contributions towards the war*.—By the close of the year railway staff had begun to contribute generously towards the war effort, either in the form of subscriptions to Government loans issued for this purpose or in response to appeals from His Excellency the Viceroy and Governors of Provinces for funds in the same connection.

CHAPTER IX.

AMENITIES FOR PASSENGERS.

107. In this chapter measures for the comfort and convenience of passengers, with special reference to those travelling in the lower classes, are described. The following paragraphs explain briefly the steps taken by individual railways to provide improved types of carriages and clean and comfortable accommodation in trains, the arrangements for ensuring safety of women passengers, the running of restaurant and buffet car services and the improvement of amenities at stations—such as refreshment rooms, vendors stalls, waiting halls, covered and raised platforms, foot over-bridges and the opening of additional booking offices and out-agencies. As the supply of pure drinking water to passengers in trains and at stations, particularly during the hot weather months, is of primary importance, arrangements therefor continued to receive special attention. In addition to the water taps, storage tanks and pots provided at stations, over 4,000 water-men were in permanent employment on Class I Railways; these were supplemented by about 2,500 temporary staff during the hot weather months, the cost on account of the latter amounting to about Rs. 1 lakh on ten railways alone.

108. New types of third class carriages.—New and re-built coaching stock placed in service during the year under review included approximately one hundred full third class carriages and fifty composite carriages with third class accommodation. All carriages were built to improved designs, full third class broad gauge carriages being of the " six-compartment " type approved by the Central Advisory Council for Railways. Small compartments were likewise introduced in the designs of a number of metre gauge carriages including 27 full third class carriages on the South Indian Railway. With a view to obtain a greater measure of uniformity in the passenger accommodation provided by different railways and more particularly to improve the standard of comfort in third class carriages the Railway Board issued a schedule of requirements in the designs of coaching stock during the latter part of the year for the guidance of railways.

109. Measures taken to ensure security of women passengers in trains.—The question of security of women passengers continued to receive special attention of railways. Further progress was made with the fitting of internal safety catches or devices on the doors and windows of women's compartments to enable passengers to secure the compartments at night against the entry of unauthorised persons in running trains. On the Great Indian Peninsula Railway, the intermediate and third class compartments are in addition being provided with expanded metal or weldmesh frames on the outsides of window openings in the doors and bars to all windows. The question of providing bars on windows of women's compartments has also generally engaged the attention of all railways.

Other steps taken in this connection include marshalling of trains with a view to positioning lower class compartments for women either in the middle of the train or near the guards' compartment, instructions to special ticket examiners to check servants' compartments to preclude the possibility of undesirable persons travelling in such compartments when they are close to women's compartments and a more vigilant watch on the off-side of women's compartments at night. The provision of additional alarm chain pulls in easily accessible positions, of safety locking arrangement and of bars on windows was under consideration on the Madras and Southern Mahratta Railway.

110. Provision of third class accommodaticn on fast through trains.—It is the general practice on most railways to ensure that the third

class accommodation on fast through trains is not "crowded out" by passengers on short journeys, to the inconvenience of those travelling longer distances. Third class accommodation was provided on all trains run by the Bengal and North-Western, Bengal Nagpur, Eastern Bengal, Jodhpur, Rohilkund and Kumaon and South Indian Railways. On the Bombay, Baroda and Central India Railway the only trains excepted to third class were the Frontier Mails between Bombay and Delhi. On the East Indian Railway all trains carried third class passengers with the exception of 5 Up and 6 Down Punjab Mails, which serve only the upper and intermediate classes. On the Great Indian Peninsula Railway the only exception was the "Deccan Queen" but third class passengers could travel by the Poona Mail which ran at practically the same time of the day and took very little longer. On the Madras and Southern Mahratta Railway third class accommodation was provided on 36 Mail and Express trains. On the North Western Railway third class passengers were carried without restriction by all express and fast through trains and also by Mail trains, on which, however, certain limitations were imposed as to distance.

111. Booking offices and out-agencies.—*Assam Bengal Railway.*—Booking offices were provided at Bipulashar, Bengura, Kujibali and Hashimpur halts. A new out-agency was opened at Chittagong (Lamarbazar).

Bengal and North-Western Railway.—A new booking office was opened at Gorakhpur city. Fifty-one temporary booking offices were opened at eleven stations during melas, of which nine were opened at Sonepore alone during the Kartic Purnamashi mela. During Magh mela, an out-agency was opened at Barhalganj served by Dohri Ghat station.

Bombay, Baroda and Central India Railway.—The following halts were converted into regular flag stations:—

	Between.
Bhestan	Sachin and Udhna.
Nenpur	Mehmadabad Kaira Road and Kanij.
Wasna Iawa	Sanand and Chharodi.
Jalalpur Panwara . . .	Kanauj and Jasoda.
Sahijpur	Asarva and Naroda.

A halt between Kantharia and Tralsamadh and another between Ajmer and Makhupura were also opened.

Great Indian Peninsula Railway.—During the Ashadi fair held in June and Kartiki fair in November, additional booking offices were opened at Pandharpur.

Madras and Southern Mahratta Railway.—38 out-agencies were opened in the area served by the railway. The following seven out-agencies dealing with goods and parcels traffic were opened during the year:—

Out-agency.	*Station served.*	*Distance (Miles).*
Athni	Shedbal	21
Banaganapalle . .	Panyam	16
Koilkuntla . . .	Nandyal	25
Jamkhandi . . .	Kudchi . . .	34
Rabkavi . . .	Do.	22
Terdal . . .	Do.	18
Ilkal	Bagalkot	37

The following passenger halts were opened during the year:—

Name.	*Between.*
Dowlaiswaram	Rajhamundry and Kadiam.
Satyavada	Tanuku and Kaldhari.
Honaganahalli	Jumnal and Mulvad.
Kavutaram Gate	Near Kavutaram.
Cherukuvada	Akividu and Undi.

Mysore State Railway.—A spacious booking office with four windows was opened at Mysore.

His Exalted Highness the Nizam's State Railway.—Additional booking offices were opened temporarily for important jattras and melas to meet traffic demands.

North Western Railway.—City booking offices and out-agencies were opened at the following places:—

City booking offices.	*Out-agency.*
Hoshiarpur.	Shahr Sultan.
Gurdaspur.	Alipur.
Muzaffarnagar.	Rohilanwali.
Ferozepore Cantonment.	Khangarh.
Ferozepore City.	Dorangla.
Lyallpur.	Hariana.
New Delhi (Connaught Place).	Nathia Gali
Sargodha.	Daska.
	Pindi Gheb.
	Mirpur (Kashmir).
	Hazro.
	Kotgarh.

During the year train halts were also opened at Bakainwala, Koharsinghwala, Bhagsar, Bhila Gulab Singh, Sahowala, Sobhianwala and Peshawar Fort.

South Indian Railway.—(*a*) Temporary booking offices were opened during festival periods at:—

Velanganni.
Mayavaram Town.
Srirangam Temple.
Tiruppirathurai.
Conjeeveram Town—
(i) Gangana Mantapam.
(ii) Hodgsonpet.
Chidambaram Town.
Tiruvannamalai.
Alwaye River Bed.
Trichur Exhibition Grounds.
Palni (Foot of the Hills).
Veli.
Attur.
Trivadi

(*b*) Train halts were opened at:—

Broad Gauge—
Ranganathapuram Road.
Palappuram.
Mudadi.
Tannirpalli.

Metre Gauge—
Karasangal.
Madattukulam.
Ten Pasiyar.
Tyagarajapuram.
Kalahastinathapuram.
Rajamatam Road.
Virapandiyanpatnam.

(c) Town booking offices were opened at :—

	Nearest Station.
Simhakkal	Madura.
Tirumayam Town . .	Tirumayam.
Ramachandrapuram . .	Tirumayam.
Keelasevalpatti . .	Tirumayam.
Konapet	Tirumayam.
Rayavaram	Tirumayam.
Vikramasingapuram . .	Ambasamudram.
Upper Dam site . . .	Ambasamudram.
Lower Dam site . . .	Ambasamudram.

Not only are tickets issued at these booking offices but arrangement also exists for conveyance of passengers by buses.

(d) Out-agencies were opened at the following places:—

Name.	*Served by*
Pudukottai Town . . .	Pudukottai.
Bhavani Kudal	Erode.
Turaiyur	Trichinopoly Junction and Trichinopoly Fort.
Chinnamanur	Theni.
Kambam	Theni.
Satyamangalam	Coimbatore.

112. Waiting rooms and waiting halls.—*Assam Bengal Railway.*—The following accommodation was provided during the year for intermediate and third class passengers :—

(i) ladies' waiting rooms at Srinidhi, Bhairab Bazar and Haibargaon.

(ii) a ladies' waiting room and a waiting hall at Sarupathar, a newly built station and a waiting hall at Muhuri Gunge, also a newly opened station.

(iii) passenger shelters at Bipulashar, Bengura, Kujibali and Hashimpur halts.

(iv) improvement to the waiting room at Sarkarhat.

Bengal and North-Western Railway.—One third class waiting hall at Bilthara Road and another at Lar Road were built at a cost of Rs. 2,461 and 2,667 respectively. At Begusarai one third class waiting hall with a waiting room for ladies was provided at a cost of Rs. 4,300. On the main platform at Gonda, a passenger hall was provided at an approximate cost of Rs. 7,308.

Bengal Nagpur Railway.—Intermediate class waiting rooms were built at Purulia and Midnapore, third class waiting rooms for the public generally at Raipur, Dongri, Buzurg and Jhargram and for women at Machada and Jhargram. The floor of the third class passenger serai at Tatanagar was cemented. Passenger sheds were provided at Komakhan, Rampalli, and Chatrapur Court passenger halts.

Bombay, Baroda and Central India Railway.—The extension of the shed on the broad gauge passenger platform and the provision of a covered passage from the broad gauge to the metre gauge passenger platform at Ahmedabad were sanctioned. A new waiting hall was provided at Sabli Road on the metre gauge.

Eastern Bengal Railway.—An intermediate class ladies' waiting room was built at Santahar and a third class waiting room for ladies at Sonahat. Improvements were also made to the intermediate and third class waiting rooms at Ragurampur, Calcutta main, Banmankhi, Sukhanpukur, Golakganj, Kalchini, Fatulla, Dhubri, Manshahi and Kaunia at a cost of Rs. 21,070.

East Indian Railway.—Intermediate class waiting rooms were provided for the general public at Katwa and Jehanabad and one for ladies and another for general public at Dehra Dun. Third class zenana enclosures were also provided at Tinpahar, Monirampur, Purbasthali, Masagram, Belmuri, Chandanpur, Gurup, Dhakhineswar, Barharwa, Rajbandh and Pandarak.

Great Indian Peninsula Railway.—A new third class waiting hall was provided at Kulali.

Jodhpur Railway.—The following additional waiting rooms were provided during the year :—

Station.	*Class.*
Mirpurkhas	Intermediate (General).
Phalodi	Third (Women).
Pachpadra City, Bakra Road Shahpur Chakar, Mohattanagar Jam Sahib, Mari Sind and Shafiabad.	Third (General).

Madras and Southern Mahratta Railway.—As in the previous year, the upper class waiting rooms on branch lines, from which upper class train accommodation has been withdrawn, were assigned for the use of intermediate class passengers. Shelters for passengers were provided at Dawalaiswaram, Satyavada, Honaganahalli, Kavutaram Gate and Cherukuvada passenger halts.

North Western Railway.—The following additions were made during the year :—

Station.	*Waiting rooms or halls.*	*Approximate cost.*
		Rs.
Quetta	Intermediate and Third class	17,700
Kalka	Intermediate	396
Mehta Suja	Third Class	3,500
Raya Khas	Do.	3,500
Kandiaro	Do.	2,070
Maur	Do.	1,250

First and second class waiting rooms were provided at Quetta and a combined first and second class ladies' waiting room at Pad Idan.

The second class waiting rooms at Lahore were extended and urinals, bath-rooms and latrines (both Indian and European styles) were provided therein. Extra accommodation was provided at Mansa Nammal and Jand.

South Indian Railway.—Waiting rooms or sheds were provided at :—

Pudiyangadi Train Halt.
Puliyur Train Halt.
Reddipalayam Train Halt.
Kudlu Train Halt.
Coimbatore station } in connection with re-modelling.
Pollachi station }

The following statement summarises the number of *waiting rooms and waiting halls* provided on each Class I railway for the use of intermediate and third class passengers :—

—	A. B.	B. & N.-W.	B. N.	B., B. & C. I.	E. B.	E. I.	G. I. P.	Jodhpur.	M. & S. M.	Mysore State.	N. S.	N. W. C.	N. W. S.	R. & K.	S. I.
1. Total number of stations open for passenger traffic.	305	351	535	633	453	768	567	164	495	129	213	870	174	98	605
2. Number of stations at which waiting rooms or halls have been provided for intermediate class passengers :—															
(i) generally	12	5	19	1	8	151	..	2	6	..	..	18	4	..	..
(ii) for women only . . .	5	10	14	1	4	57	..	..	..	..	..	18	3	3	..
3. Number of stations at which third class waiting rooms or halls have been provided :—															
(i) generally	265	253	469	484	437	399	478	119	456	112	213	698	111	95	588
(ii) for women only . . .	135	35	70	2	329	184	15	7	11	5	2	48	13	12	13
4. Percentage of stations at which waiting rooms or halls have been provided as compared with the total number of stations open for passenger traffic :—															
(i) for intermediate class, generally .	3·93	1·43	3·55	0·16	1·77	19·7	..	1·22	1·21	..	..	2·07	2·30	..	..
(ii) for intermediate class, women only.	1·64	2·85	2·62	0·16	0·88	7·42	..	..	..	..	..	2·07	1·72	3·06	..
(iii) for third class, generally . .	86·9	71·8	88·0	76·5	96·5	51·9	84·7	72·6	92·3	86·8	100·0	80·2	63·8	96·9	97·2
(iv) for third class, women only .	44·3	10·0	13·0	0·32	72·6	23·9	2·65	4·33	2·22	3·88	0·94	5·52	7·47	12·2	2·15

C.=Commercial. S.=Strategic.

113. Covered and raised platforms.—The following statements show the position at the end of the year 1939-40 in regard to platforms generally :—

113.1. Number of stations provided with covered platforms.

—	A. B.	B. & N.-W.	B. N.	B., B. & C. I.	E. B.	E. I.	G. I. P.	Jodhpur.	M. & S. M.	Mysore State.	N. S.	N. W. C.	N. W. S.	R. & K.	S. I.
1. Total number of stations open for passenger traffic.	305	351	535	633	453	768	567	164	495	129	213	870	174	98	605
(i) Class D (or flag) stations . .	118	21	67	126	124	135	94	57	79	13	73	235	33	6	145
(ii) Other than class D (or flag) stations.	187	330	468	507	329	633	473	107	416	116	140	635	141	92	460
2. (i) Number of stations at which there are two or more platforms.	89	32	83	110	89	393	190	8	53	5	24	226	12	9	83
(ii) Total number of platforms at such stations.	208	82	176	268	237	975	452	27	151	10	58	534	30	26	220
(iii) Total number of covered platforms at such stations.	7	..	4	176	120	232	125	6	67	3	13	144	3	10	95
(iv) Percentage of (iii) to (ii) . .	3·37	..	2·27	65·7	50·6	23·8	27·6	22·2	44·4	33·3	22·4	27·0	10·0	38·5	43·2
3. (i) Number of stations other than class D at which there is only one platform.	98	298	395	355	245	302	311	99	363	111	129	428	130	83	377
(ii) Number of such stations at which there are covered platforms.	..	..	1	5	..	59	9	..	22	1	..	8	1	..	8
(iii) Percentage of (ii) to (i) . .	..	..	0·25	1·41	..	19·5	2·89	..	6·06	0·90	..	1·87	0·77	..	2·12

C.=Commercial. S.=Strategic.

113.2. Number of stations provided with platforms above rail level.

—	A. B.	B. & N. W.	B. N.	B., B. & C. I.	E. B.	E. I.	G. I. P.	Jodhpur.	M. & S. M.	Mysore State.	N. S.	N. W. C.	N. W. S.	R. & K.	S. I.
1. Total number of stations open for passenger traffic.	305	351	535	633	453	768	567	164	495	129	213	870	174	98	605
(i) Class D (or flag) stations	118	21	67	126	124	135	94	57	79	13	73	235	33	6	145
(ii) Other than class D (or flag) stations.	187	330	468	507	329	633	473	107	416	116	140	635	141	92	460
2. (i) Number of stations other than flag stations at which there are more than one platform.	89	32	76	100	84	369	161	8	53	5	11	213	12	9	83
(ii) Total number of platforms at such stations.	208	82	159	247	225	935	394	27	151	10	32	509	30	24	220
(iii) Total number of platforms at such stations above rail level.	12	67	132	233	188	607	314	20	151	7	32	389	23	20	150
(iv) Percentage of (iii) to (ii)	5·77	81·7	83·0	94·3	83·6	64·9	79·7	74·1	100·0	70·0	100·0	76·4	76·7	83·3	68·2
3. (i) Number of stations at which there is only one platform.	216	319	449	490	364	361	344	156	442	124	189	633	162	87	522
(ii) Number of such stations at which platforms are above rail level.	3	153	123	203	135	177	196	10	283	42	73	188	84	27	277
(iii) Percentage of (ii) to (i)	1·39	48·0	27·4	41·4	37·1	49·0	57·0	6·41	64·0	33·9	38·6	29·7	51·9	31·0	53·1

C. = Commercial. S. = Strategic.

114. Refreshment rooms for Hindus and Mahomedans.

The table below shows the number of stations on Class I Railways, provided with refreshment rooms for Hindus and Mahomedans on 31st March 1940, and of these the additions that were made during 1939-40.

Railway.	Number of stations provided at the end of the year with: Hindu and Mahomedan refreshment rooms.	Hindu refreshment room (rooms) only.	Mahomedan refreshment room (rooms) only.	Number of refreshment rooms which were provided during the year: Hindu.	Mahomedan.
Assam Bengal	8	..	..	1	2
Bengal and North-Western	..	10	10	..	..
Bengal Nagpur	17	..	6	..	..
Bombay, Baroda and Central India	1	11	5	1	1‡
Eastern Bengal	10	3	1	..	..
East Indian	14	5	4	..	..
Great Indian Peninsula	6	1	..	..	..
Jodhpur	3	1	..	..	..
Madras and Southern Mahratta †	5	22*	..	..	..
Mysore State	16	15	2	..	..
His Exalted Highness the Nizam's State	10	..	..	..	..
North Western	22	..	..	..	..
Rohilkund and Kumaon	1	..	..	..	..
South Indian	..	30*	6	1	2

* Hindu refreshment rooms, though run on Hindu lines supplying vegetarian Hindu food, are open to other communities also.
† Excludes one Christian refreshment room at Mormugao Harbour.
‡ Cosmopolitan Indian refreshment room at Bharatpur.

115. Vendors' stalls in waiting rooms and on platforms.—*Assam Bengal Railway.*—Three stalls were opened for Hindus at Netrakona, Fulgazi and Hajiganj and one for Mohammedans at Manipur Road. Improvements were made to the Marwari, Hindu and Mohammedan stalls at Mariani, Hindu and Mohammedan stalls at Badarpur and Mohammedan stall at Chittagong port.

It is also proposed to overhaul completely the existing arrangements for Indian catering, as a result of which train vending will be discontinued and stalls providing aerated waters, ice and tea will be opened at average intervals of 20 miles. This proposal was approved by all the members of the Advisory Committee except three.

Bengal and North-Western Railway.—One new stall was opened at Jaynagar.

Bengal Nagpur Railway.—At Drug and Rajnandgaon stations arrangements were made for serving tea and light refreshments in the third class waiting halls.

Bombay, Baroda and Central India Railway.—One tea stall was provided at Elphinstone Road on the broad gauge and another at Netrang on the Rajpipla State Railway.

Eastern Bengal Railway.—Stalls were opened for the first time at Forbesganj, Bahadurabad, Santoshpur, Nangi and Kumarkhali. At Bogra and Bongaon additional stalls were opened during the year.

East Indian Railway.—A vendor's stall at Khurja and a tea kiosk at Mandar Hill were opened.

Great Indian Peninsula Railway.—Three stalls were opened at Lasalgaon, Sewri and Matunga and the one at Vambori was closed.

Jodhpur Railway.—During the year vendors' stalls were opened at Kunri (Sind), Shapur Chakar, Samaro Road, Digri, Merta Road, Dhoro Naro.

Mysore State Railway.—At the end of the year stalls were opened at 18 stations.

His Exalted Highness the Nizam's State Railway.—Twenty-eight new type vending trollies were issued to important stations. The equipment of tea stalls was augmented by the issue of 22 new dining tables, 88 new chairs, 12 new counter show cases, 12 new almirah show cases and 24 automatic fly traps; 40 tray covers were also supplied to stations.

North Western Railway.—Two additional stalls were provided one each at Lala Musa and Dadu. Two tea stalls, one at Mardan and another at Pakpattan were closed.

South Indian Railway.—Tea stalls were opened at Trichinopoly Goods, Karaikhudi and Karur, fruit stalls at Shiyali, Nidamangalam, Tiruvannamalai, Kodambakam, Madura East and Paravur and Mahommedan light refreshment stalls at Negapatam and Erode.

The following statement summarises the number of stations on Class I Railways, at which there were vendors' stalls :—

Railways.	Number of stations at which stalls were in service on 31st March 1940.	Number of stalls opened during the year.
Assam Bengal	95	4
Bengal and North-Western	58	1
Bengal Nagpur	83	2
Bombay, Baroda and Central India	139	2
Eastern Bengal	89*	7
East Indian	118	2
Great Indian Peninsula	133	3
Jodhpur	13	6
Madras and Southern Mahratta	127	..
Mysore State	18	..
His Exalted Highness the Nizam's State	46	..
North Western	124	2
Rohilkund and Kumaon	13	..
South Indian	103	11

* Does not include stalls provided on three ferry services.

116. Water supply for passengers.—As usual, arrangements were made for an adequate and clean supply of water to passengers on platforms and in trains and waiting halls. In addition to the provision of water taps and hydrants at large stations, suitable arrangements were made for the storage of water in earthen vessels, water huts being provided at certain stations. The permanent staff of watermen employed for the distribution of water to passengers was, as in the past, strengthened during the hot weather by the engagement of temporary staff. Mention is, however, made of the special arrangements in force on certain railways during the year:—

Assam Bengal Railway.—English filters of Berkfeld type were in use at 22 stations. Portable water barrows were also in service at six stations.

Bengal and North-Western Railway.—Watermen were dressed in red shirts and red and yellow turbans so that they could be easily spotted by passengers.

Seventeen additional hydrants and three tube-wells were provided at a cost of about Rs. 13,000.

Bengal Nagpur Railway.—173 drums on wheels were in use for distribution of water to the travelling public. A drinking water shelter at Bobbili and a tube-well at Haur were provided during the year.

Eastern Bengal Railway.—The overhead drinking water tank at Siliguri was covered; a water tap was provided in the third class waiting room at Rungpur and a reservoir for drinking water was built at Ballygunge, all at a total cost of Rs. 1,600. A further sum of Rs. 7,600 was spent for the provision of special facilities at 18 small stations, including the provision of tube-wells at 14 stations.

Great Indian Peninsula Railway.—Water tanks fitted with spouts were provided to prevent wastage and at the same time ensure the supply of clean water to passengers. Four hand-propelled lorries in service on the Bhusaval Division were fitted with swivel wheels to facilitate manipulation.

Madras and Southern Mahratta Railway.—Earthenware pots with brass cocks were supplied to eight more stations and one 40 gallon receptacle with two taps was supplied to Cocanada Town for storing water. Taps were provided on the platform at Powerpet.

His Exalted Highness the Nizam's State Railway.—A water tap was provided on the passenger platform at Belampalli and another in the third class waiting hall at Khammameth.

North Western Railway.—The earthen pots for the storage of water were renewed thrice during the year. Hand-barrows were provided at many of the large stations to facilitate supply of water to passengers in trains. Dippers with long handles or alluminium mugs were supplied to the watermen for dealing out water to passengers from pots and buckets. On those sections of the line where good drinking water is not available, adequate quantities were carried in a third class compartment of each train.

South Indian Railway.—Owing to the scarcity of good drinking water on certain sections, water tanks were run for the supply of water to passengers and staff. The water supply arrangements at Vellore, Madras Beach, Cuddalore Junction and Panruti were improved.

117. Restaurant or buffet car services.—*Assam Bengal Railway.*—Kitchen cars were run on the Up and Down Chittagong and Mymensingh Express trains.

Bengal Nagpur Railway.—Restaurant cars catering in the European style were run on:—

	Between
The Bombay Mails . . .	Howrah and Nagpur.
The Madras Mails . . .	Howrah and Vizianagram.

Bombay, Baroda and Central India Railway.—Restaurant cars catering in the European style were run on the following services:—

	Between
The Frontier Mails . . .	Bombay and Delhi.
Sind and Delhi Mails . . .	Ahmedabad and Ajmer.
Delhi Express trains . . .	Delhi and Ahmedabad.

A restaurant car was also run on the week-end "Flying Ranee".

Dining compartments catering in the Indian style for Hindus and Mahommedans separately were provided in third class carriages on the following trains:—

	Between
Kathiawar Express . . .	Bombay Central and Viramgam.
Delhi Express	Bombay Central and Delhi.
Flying Ranee	Bombay Central and Surat.
Ahmedabad Mails . . .	Ahmedabad and Dhandhuka (Hindu car).

Eastern Bengal Railway.—On the broad gauge restaurant cars were run on the Assam Mails between Calcutta and Parbatipur and on the metre gauge on the 211 Up and 212 Down passenger trains between Parbatipur and Sorbhog. These cars not only provided meals and refreshments in European style to upper class passengers but also served special vegetarian meals and individual vegetarian dishes in the dining cars provided the requirements were intimated sufficiently in advance. The cars on the metre gauge trains were, however, withdrawn from 1st October 1939 owing to inadequate patronage.

East Indian Railway.—European style restaurant cars were run on:—

	Between
The Delhi Kalka Mails . .	Howrah and Asansol and Moghalsarai and Delhi.
The Bombay Mails . . .	Moghalsarai and Chheoki.
The Punjab Mails . . .	Howrah and Lakhsar.
The "Delhi" Expresses . .	Howrah and Delhi.

Indian restaurant cars (for lower class passengers) with separate kitchens for Hindus and Mahommedans were run as under:—

	Between
13 Up and 14 Down Express trains .	Moghalsarai and Delhi.
17 Up and 18 Down Express trains .	Howrah and Dinapore.

Great Indian Peninsula Railway.—Restaurant cars catering in the European style were run on 18 trains, including the Deccan Queen and Imperial Indian Mail which ordinarily run once a week in each direction. Indian restaurant cars were run on two trains and buffet cars on four trains.

Jodhpur Railway.—Restaurant cars catering in the European style were run on:—

Mail trains between Marwar Junction and Hyderabad (Sind), Refreshment cars catering Indian style were run on:—

	Between
11 Up and 12 Down trains . .	Hyderabad (Sind) and Hyderabad (Sind) *viâ* Mirpurkhas, Pithoro and Jhudo.
9 Up and 10 Down Mixed trains .	Jodhpur and Hyderabad.
29 Up and 30 Down Mixed trains .	Degana and Sujangarh.

Indian buffet cars providing light refreshment were run on the following trains :—

	Between
63 Up and 64 Down mixed . .	Jodhpur and Phalodi.
21 Up and 22 Down mixed . .	Samdari and Raniwara.
55 Up and 56 Down mixed . .	Mirpurkhas and Nawabshah.

Madras and Southern Mahratta Railway.—Indian restaurant or buffet car services were operating during the year on :—

Broad Gauge.	*Between*
Nos. 23 and 24 Expresses . .	Madras and Bangalore.
Nos. 15 and 16 Passengers . .	Madras and Bangalore.
Nos. 3 and 4 Expresses . .	Madras and Bezwada.
Nos. 9 and 32 Passengers . .	Bezwada and Waltair.
Metre Gauge.	*Between*
Nos. 1 and 2 Mails . . .	Hubli and Miraj.
Nos. 3 and 4 Expresses . .	Harihar and Hubli.
Ditto	Miraj and Poona.
Nos. 5 and 6 Passengers .	Belgaum and Poona.
Nos. 73 and 74 Passengers .	Guntakal and Hubli.
Nos. 13 and 14 Passengers .	Bezwada and Guntakal.
* Nos. 67 and 68 Passengers .	Hindupur and Guntakal.

Mysore State Railway.—Indian style restaurant cars were run on :—

	Between
3 Up and 4 Down Poona Expresses	Bangalore City and Harihar.
67 Up and 68 Down Guntakal Passengers	Bangalore City and Hindupur.

His Exalted Highness the Nizam's State Railway.—Four broad gauge Indian buffet cars having separate kitchen and dining arrangements were run on :—

	Between
1 Up and 2 Down Passengers .	Wadi and Bezwada.
7 Up and 8 Down Passengers .	Bezwada and Hyderabad.

North Western Railway.—Dining cars catering in the European style were run on the following trains :—

	Between
7 Up Karachi Mail . . .	Karachi City and Kotri.
7 Up and 8 Down Karachi Mails .	Rohri and Lahore.
9 Up and 10 Down Quetta Mails	Karachi City and Rohri.
3 Up and 4 Down Frontier Mails	Lahore and Pashawar Cantonment.
6 Down Calcutta Mail . .	Lahore and Jullundur City.

Dining cars catering in Indian style were run on :—

	Between
57 Up and 58 Down Bombay Expresses	Delhi and Lala Musa.
7 Up and 8 Down Karachi Mails	Rohri and Lahore.

Rohilkund and Kumaon Railway.—Restaurant cars catering in the European style were run on the Agra-Kathgodam Express trains.

* Cancelled from 1st August 1939.

South Indian Railway.—European style dining cars were run on :—

	Between
The Indo-Ceylon Expresses .	. Trichinopoly Junction and Dhanushkodi.
The Blue Mountain Expresses	. Erode and Mettupalaiyam (during the Hill season).

Indian buffet cars providing light refreshments were run on :—

	Between
The Dhanushkodi Passengers	. Throughout the run.
The Trivandrum Passengers	. Mayavaram Junction and Shencottah.
The Shencottah Passengers .	. Madras (Egmore) and Shencottah.

118. Improvements to existing lower class carriages.—Amongst the improvements carried out by railways were the following :—

The fittings of a large number of inter-communicating windows between adjoining male and female compartments, safety catches on the doors and windows of third class ladies' compartments on the Assam Bengal Railway, and the provision of additional alarm pulls in third class ladies' compartments on the East Indian Railway broad gauge and South Indian Railway metre gauge stock. The latter also fitted internal safety catches to the doors of many third class ladies' compartments together with iron bars for the door openings. On the Assam Bengal Railway the substitution of canvas covered cushions in intermediate class compartments by imitation leather continued and further numbers of independent switches were provided. The North Western Railway continued their policy of replacing steel window louvres by wood louvres and converted several centre double seats in intermediate class compartments into single seats. Additional illuminated panels showing third class ladies' compartments were fitted by the Assam Bengal Railway, whilst the East Indian Railway improved the standard of lighting in many of their existing panels.

Latrine improvements continued to receive the attention of railways. On the Bengal and North-Western Railway a number of carriages with no latrines were equipped when they passed through shops for re-building, whilst a number on the Rohilkund and Kumaon Railway fitted originally with two latrines were re-built with three to the approved standard. Further improvements on railways were the raising of the standard of many latrines and their provision in 17 metre gauge coaches on the South Indian Railway. Improved flushing pans were fitted in third class coaches on the Assam Bengal and Eastern Bengal railways and the provision of wash-hand basins and mirrors in intermediate class compartments continued on the Assam Bengal and North-Western railways, who also replaced the European type of commodes with those of Indian type. In addition the Assam Bengal Railway fitted a considerable number of latrine doors and windows with frosted glass and lota brackets in latrines. On the Madras and Southern Mahratta Railway latrine lighting was improved as vehicles passed through shops.

119. Arrangements to ensure cleanliness of latrines in passenger trains.—On all railways arrangements exist for the cleaning of bathrooms and latrines on trains at all train examining stations. The following are some of the important features emphasized by railway administrations in this connection :—

Assam Bengal Railway.—At selected train examining stations all carriages were required to be thoroughly washed and cleaned and the roof

tanks emptied, cleaned and re-filled. To ensure observance of rules District and Assistant Officers carried out inspections of carriages when out on the line.

Bengal and North-Western Railway.—At carriage examining stations latrines in trains were cleaned by sprayers under the personal supervision of the Carriage Examiners.

Bombay, Baroda and Central India Railway.—Notices were exhibited in lavatories of third class carriages on broad gauge lines advising the public to inform the guard or station staff—where a sweeper's services were required. The notices gave the names of stations at which sweepers were specially provided for this duty.

Great Indian Peninsula Railway.—During the "lay off" periods between trips, latrines in trains were thoroughly scrubbed, flushed and disinfected under proper supervision. The duties of the carriage sweepers and station sweepers were so arranged that the maximum number of staff were available to clean latrines in trains during stoppage times.

Madras and Southern Mahratta Railway.—Travelling sweepers were deputed to accompany trains on their run in the early hours of the morning.

120. Overcrowding in third class carriages.—This is a subject which receives the constant attention of all railway administrations and is frequently discussed at the meetings of the various railways Local Advisory Committees. Censuses are taken every year during a period when traffic is brisk, usually the month of June, and where a train is found to be frequently overcrowded, it is either strengthened by the addition of a carriage where the load permits, or, where that is not possible, suitable alterations are made in the time-tables so that the traffic is more evenly distributed over the trains serving the sections where overcrowding has been noticed. In some cases it has been found possible to provide additional accommodation for third class traffic by reducing the amount of upper class accommodation. During rush periods such as *melas*, the marriage season, Easter, Diwali, and Christmas holiday periods, in addition to strengthening ordinary trains, arrangements are made to provide additional special trains.

121. Suggestion or complaint books and boxes.—It is the practice on most railways to maintain suggestion or complaint books (on some railways suggestion or complaint boxes are provided) at certain stations, the number of which has been steadily increasing year by year. In order to bring to the notice of the travelling public the existence of these books or boxes, notices in English and the local Indian languages are displayed in suitable places. Also some railways print information on this subject in their time-tables and guides. These books and boxes are frequently used by the public and periodically inspected by the Railway Administrations and action is taken on the complaints or suggestions made. The following list shows the chief items of complaints and suggestions made by the travelling public :—

(1) Unsatisfactory supplies of food and drink.

(2) Inadequate supplies of drinking water.

(3) Complaints regarding—

- (*a*) refreshment rooms, restaurant cars and vendors' stalls;
- (*b*) incivility, discourtesy or inattention of staff;
- (*c*) overcrowding of trains;
- (*d*) detentions at level crossing gates;
- (*e*) defective fans or lights in trains or station waiting rooms and other deficiencies to carriage fittings.

(4) Suggestions for improving station waiting rooms and latrines.

(5) Alterations to train services, etc.

122. Foot over-bridges.—The statement below gives the number of stations provided with foot over-bridges on Class I Railways at the end of the year 1939-40 :—

Railway.	Number of stations provided with foot over-bridges on 31st March 1940.	STATIONS PROVIDED WITH FOOT OVER-BRIDGES DURING THE YEAR 1939-40.	
		Number.	Name of Station.
Assam Bengal	18	..	....
Bengal and North-Western	15	1	Savan.
Bengal Nagpur	84	1	Mohuda.
Bombay, Baroda and Central India	71	..	....
Eastern Bengal	71	..	....
East Indian	142	3	Jhinjhak. Ahraura Road. Meja Road.
Great Indian Peninsula	78	..	....
Jodhpur	3	1	Mirpurkhas.
Madras and Southern Mahratta	45	..	....
Mysore State	4	..	....
His Exalted Highness the Nizam's State.	55	..	....
North Western	149	1	Nawabshah.
South Indian	46	5	Vandalur. Guduvancheri. Kattupakkam. Singaperumalkoil. Pollachi.

CHAPTER X.

MISCELLANEOUS.

123. Accidents.—The following are the details of major accidents which occurred during the year :—

(*a*) On the 17th April 1939, No. 8 Down Dacca Mail ran into the rear of No. 16 Down North Bengal Express, which was standing on the down platform at Majdia station, Eastern Bengal Railway, resulting in 35 persons being killed and 55 injured.

The approximate damage to the engine and rolling stock amounted to Rs. 79,000 and to track Rs. 900. The accident was ascribed to the driver of No. 8 Down Dacca Mail passing signals at danger.

(*b*) On the 28th June 1939, No. 33 Up, known as Delhi-Dehra Dun Mixed Express, ran into a breach in the embankment at mile 26/2 between Chandpur-Siau and Haldaur on the East Indian Railway, resulting in the death of 10 and injuries to 25 persons. The approximate damage to rolling stock amounted to Rs. 80,000 and to permanent-way Rs. 2,070. The accident was due to a breach caused by the permeation of flood water through the bank either through the ballast backing behind the bridge abutment or through burrows and holes made by animals. The Senior Government Inspector found that neither the administration nor any of the staff were responsible or negligent.

(*c*) On the 28th October 1939, Diesel rail car No. 92 ran into a motor bus at an unmanned 'C' class level crossing near Moga Tahsil on the Ludhiana-Ferozepur section of the North Western Railway, resulting in the death of 9 and injuries to 13 persons. The damage to the Diesel car amounted to Rs. 300. The accident was due to the carelessness of the motor bus driver, who endeavoured to cross the railway track in front of the on-coming rail car: his engine stalled and the bus stuck on the railway line.

(*d*) On the 5th January 1940, No. F. Down Goods train ran into a motor lorry at level crossing No. 5-I.-E., near Bharatkhali station on the Tistamukh Ghat-Bonarpara (metre gauge) section of the Eastern Bengal Railway, resulting in the death of 3 and injuries to 14 persons. The accident was due to the negligence of the gateman at the level crossing, who left the gate unchained and absented himself from his post.

(*e*) On the 20th March 1940, No. 531 Down Goods train crashed into the down catch siding at Khodri on the Bengal Nagpur Railway, resulting in the entire engine crew—a driver and 2 firemen—being killed instantaneously. The damage to the engine amounted to Rs. 15,000. The accident was due to the assistant station master admitting No. 531 down goods into the section in direct contravention of the station working rules.

124. Review of accident statistics.—(*a*) The following table shows the number of passengers, railway servants and other persons killed and injured in accidents on Indian Railways, during the year 1939-40 as

compared with the previous year; these exclude casualties in railway workshops :—

Cause.	Killed.		Injured.	
	1938-39.	**1939-40.**	1938-39.	**1939-40.**
A.—Passengers.				
(i) In accidents to trains, rolling-stock, permanent-way, etc.	66	**44**	272	**134**
(ii) In accidents caused by movements of trains and railway vehicles exclusive of train accidents.	214	**183**	973	**1,132**
(iii) In accidents on railway premises in which the movement of trains, vehicles, etc., was not concerned.	..	**2**	19	**32**
TOTAL .	280	**229**	1,264	**1,298**
B.—Railway servants.				
(i) In accidents to trains, rolling-stock, permanent-way, etc.	17	**13**	152	**93**
(ii) In accidents caused by movements of trains and railway vehicles exclusive of train accidents.	155	**152**	3,487	**3,871**
(iii) In accidents on railway premises in which the movement of trains, vehicles, etc., was not concerned.	27	**13**	9,860	**11,918**
TOTAL .	199	**178**	13,499	**15,882**
C.—Other than passengers and railway servants.				
(i) In accidents to trains, rolling-stock, permanent-way, etc.	26	**39**	69	**73**
(ii) In accidents caused by movements of trains and railway vehicles exclusive of train accidents.	2,934	**3,069**	818	**908**
(iii) In accidents on railway premises in which the movement of trains, vehicles, etc., was not concerned.	35	**22**	159	**121**
TOTAL .	2,995	**3,130**	1,046	**1,102**
GRAND TOTAL .	3,474	**3,537**	15,809	**18,282**

Of 3,537 persons killed, 3,130 or 88 per cent. were other than passengers and railway servants and of this number 2,327 were ' trespassers ' and 623 ' suicides '. Of the 3,537, 37 persons were killed on railway premises due to causes other than the movement of trains, vehicles, etc.

The number of persons other than passengers and railway servants killed rose by 135 as compared with the previous year. This was due principally to increases under ' trespassers ' (141), ' those passing over level crossings '

(18), which were somewhat counterbalanced by decreases under 'suicides' (18) and 'miscellaneous causes' (6). There is, however, a marked decline in the number of fatal accidents to 'passengers' and 'railway servants', the decreases being 51 and 21 respectively.

(*b*) In the following statement a comparison is made of the number of passengers killed and injured in train accidents, *i.e.*, collisions, derailments, etc., as compared with the number of passengers carried during the last six years :—

Year.	* Number of passengers carried (in millions).	Killed.		Injured.	
		† Number.	Per million passengers carried.	† Number.	Per million passengers carried.
1934-35	502	14	0·03	63	0·13
1935-36	506	5	0·01	87	0·17
1936-37	512	11	0·02	67	0·13
1937-38	545	105	0·19	174	0·32
1938-39	559	39	0·07	154	0·28
1939-40	**560**	**44**	**0·08**	**131**	**0·23**

* Represents total of numbers carried on all railways.

† Excludes train wrecking and attempted train wrecking.

Out of the 44 passengers killed and 131 injured, 34 killed and 53 injured were in the accident to 8 Down Dacca Mail at Majdia on the Eastern Bengal Railway, 9 killed and 26 injured in the 'flooding of permanent-way' on the East Indian Railway and 21 injured by 'collisions between passenger trains' on the Great Indian Peninsula Railway.

(*c*) The accidents to railway servants due to the movement of trains and railway vehicles exclusive of train accidents showed a drop of 3, under 'killed' but an increase of 384 under 'injured'. The corresponding figures for Class I Railways for which details of the causes are available showed a decrease of 4 under 'killed' but an increase of 369 under 'injured'. These are analysed as under :—

Cause.	Killed.		Injured.	
	1938-39.	**1939-40.**	1938-39.	**1939-40.**
(i) Misadventure or accidental . . .	101	**95**	3,299	**3,624**
(ii) Want of caution or misconduct on the part of the injured person.	47	**48**	138	**184**
(iii) Want of caution or breach of rules, etc., on the part of servants other than the person injured.	2	**3**	21	**19**
TOTAL .	150	**146**	3,458	**3,827**

(*d*) In the following statement an analysis is made of all the accidents on all Indian Railways which occurred during the years 1938-39 and 1939-40

grouped under the various causes. The details for each railway will be found in Appendix D of Volume II of this report :—

	1938-39.	1939-40.
1. Running over cattle	8,781	**8,726**
2. Derailments not involving passenger trains	3,486	**4,725**
3. Accidents due to failure of couplings and draft gear	2,016	**1,889**
4. Accidents due to failure of engines owing to faulty material, workmanship and operation arising from the working of the running staff	1,728	**1,725**
5. Accidents due to other rolling stock failures	249	**981**
6. Accidents due to failure of engines owing to faulty material and workmanship in the mechanical department	428	**459**
7. Broken rails	358	**279**
8. Running over obstructions (other than those included under 'Train wrecking', 'Attempted train wrecking' and 'Trains running into road traffic at level crossings')	213	**248**
9. Derailments of passenger trains	274	**198**
10. Fires in trains or at stations or bridges	187	**197**
11. Collisions involving goods trains or goods vehicles	186	**147**
12. Trains running into road traffic at level crossings	94	**107**
13. Flooding of permanent-way	117	**86**
14. Attempted train wrecking	83	**85**
15. Passenger trains running in the wrong direction through points but not derailed	60	**60**
16. Land-slips	135	**56**
17. Accidents due to failure of axles	32	**49**
18. Collisions between light engines	36	**48**
19. Collisions involving passenger trains	39	**32**
20. Accidents due to failure of tyres and wheels	20	**13**
21. Accidents due to failure of brake apparatus	17	**13**
22. Train wrecking	6	**7**
23. Failure of bridges, tunnels, etc.	9	**1**
24. Miscellaneous	257	**156**
Total	18,811	**20,287**

'Running over cattle' still accounts for the largest number of accidents, *i.e.*, 43 per cent. of the total : next in order are :—

	Per cent.
Derailments not involving passenger trains	23
Accidents due to failure of couplings and draft gear	9
Accidents due to failure of engines owing to faulty working of the running staff	9
Accidents due to other rolling stock failures	5
Accidents due to failure of engines owing to faulty material and workmanship in the mechanical department	2
Broken rails	1
Running over obstructions (other than those included under 'Train wrecking', etc.)	1

(*e*) Accidents in railway workshops accounted for the death of 5 and injuries to 8,638 railway servants, which marks a decrease of 5 and 16 respectively over the previous year.

125. Damage by floods, fires and other causes.—Brief particulars of the more serious floods or other calamities which affected railways during the year under review are given below :—

Five cyclones of comparatively mild intensity were experienced over certain parts of the Assam Bengal Railway between 13th April and 13th May. The damage done to railway property, on the whole, was small and was mainly confined to some station buildings and staff quarters whose roofs were blown away. Some floods also occurred on the railway, mainly on branch lines but the damage done was in no case very serious and at some places there was no interruption to through traffic.

Owing to heavy rain on the 24th and 25th August, several serious slips occurred on the embankment between Anklesvar and Broach on the Bombay, Baroda and Central India Railway which rendered the down main line unsafe. Repairs were effected and double line working was resumed at a restricted speed on the 27th August.

On the same railway twelve wagons loaded with kirby and grass and forming part of a goods train caught fire on the 20th April and the contents were completely destroyed before the fire could be brought under control.

On the Bengal and North Western Railway the monsoons were normal and no serious flooding was experienced, though there were some minor floods.

On the Bengal Nagpur Railway, however, as a result of heavy rain on and from the 6th September in the region of the ghat section of the Katni Branch, the line between Khongsara and Bhonwar Tonk was breached, with the result that a passenger train running between these two stations in the early hours of the 7th September met with an accident. Through running on the line was restored 23 days later.

On the Eastern Bengal Railway floods in the area served by the broad gauge were not severe and the damage actually caused to railway property was less than that of the previous year. On the metre gauge, however, floods were of considerable severity especially on the Lalmanirhat district where water overtopped the rails between Kokrajhar and Basugaon and seriously damaged many bridges between Bijni and Amingaon and Tangla and Rangapara. The total flood damage repairs on this district are estimated to cost about Rs. 2,34,000. Some damage was also caused by floods on the Katihar and Dacca districts.

On the same railway a serious fire broke out in shed No. 5 at Cossipore Road causing damage amounting to about Rs. 70,000 and eleven days later a more serious fire broke out in goods sheds Nos. 22 and 23 at the same place causing damage in the neighbourhood of Rs. 1,92,000. Storms also were experienced by the railway which necessitated an expenditure of about Rs. 40,000 on repairs on the broad gauge.

On the Secunderabad-Kazipet section of His Exalted Highness the Nizam's State Railway a heavy downpour on 4th July led to the line between Jangaon, Raghunathpalli and Ghanapur being washed away at several places. The line was finally restored on the 8th July. Over the intervening period passenger train services were maintained by transhipment at the site.

On the South Indian Railway also heavy rain on the night of 6th August resulted in the line between Salem and Omalur on the Salem-Metur Dam branch being breached at several places. Through running was interrupted on the line till the 8th August. Heavy rain and cyclonic storms also occurred between 14th and 16th November in the Tanjore, Trichinopoly and Madura districts and several breaches were caused.

126. Anti-malarial measures.—These were continued and extended on most railways during the year under review. The results were generally satisfactory. Unusually high incidence of malaria in the Bombay Presidency as a result of intermittent rainfall and an epidemic in certain districts in the Madras Presidency were responsible for a high figure of primary cases on the Great Indian Peninsula and Madras and Southern Mahratta Railways; there is reason to believe that the incidence would have been higher but for control measures. Anti-malarial measures are being continued as they have yielded good results.

APPENDIX A.

Railway Administrations in India alphabetically arranged in three classes according to their gross earnings showing the working agencies, ownership and route mileage open on 31st March 1940.

NOTE.—Indian Railway Systems have been classified under three classes for statistical purposes—

Class I—Railways with gross earnings of Rs. 50 lakhs and over a year.

Class II—Railways with gross earnings of less than Rs. 50 lakhs a year, but exceeding Rs. 10 lakhs a year.

Class III—Railways with gross earnings of Rs. 10 lakhs and under a year.

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.			
Name.	Worked by	Name.	Gauge.	Route mileage.	Owned by
1	2	3	4	5	6
		CLASS I RAILWAYS.			
1. Assam Bengal . .	Assam Bengal Railway Company.	(a) Assam-Bengal .	3′ 3⅜″	1,132	State.
		(b) Chaparmukh-Silghat	3′ 3⅜″	51	Branch line Company under guarantee terms.
		(c) Katakhal-Lalabazar .	3′ 3⅜″	23	Do.
		(d) Mymensingh-Bhairab Bazar.	3′ 3⅜″	100	Branch line Company under guarantee and rebate terms.
2. Bengal and North-Western.	Bengal and North-Western Railway Company.	(a) Mashrak-Thawe .	3′ 3⅜″	39	State.
		(b) Tirhoot . . .	3′ 3⅜″	788	Do.
		(c) Bengal and North-Western.	3′ 3⅜″	1,259	Company subsidized by the Government of India.*
3. Bengal Nagpur .	Bengal Nagpur Railway Company.	(a) Central India Coalfields.	5′ 6″	54	State.
		(b) Bengal Nagpur .	5′ 6″	2,413	Do.
		(c) Purulia-Ranchi .	2′ 6″	116	Do.
		(d) Raipur-Dhamtari .	2′ 6″	57	Do.
		(e) Satpura . . .	2′ 6″	626	Do.
		(f) Mayurbhanj . .	2′ 6″	71	Branch line Company under rebate terms.
		(g) Parlakimedi Light .	2′ 6″	56	Private body.
4. Bombay, Baroda and Central India.	Bombay, Baroda and Central India Railway Company.	(a) Bombay, Baroda and Central India.	5′ 6″	1,035	State.
		(b) Bombay, Baroda and Central India.	3′ 3⅜″	1,879	Do.
		(c) Bombay, Baroda and Central India.	2′ 6″	72	Do.
		(d) Nagda-Ujjain . .	5′ 6″	35	Indian State.
		(e) Petlad-Cambay (Anand-Tarapur Section).	5′ 6″	22	Do.
		(f) Petlad Cambay (Tarapur-Cambay Section).	5′ 6″	12	Do.
		(g) Dhrangadra . .	3′ 3⅜″	40	Do.
		(h) Palanpur State .	3′ 3⅜″	17	Do.
		(i) Piplod-Devgad-Baria	2′ 6″	10	Do.
		(j) Rajpipla State .	2′ 6″	58	Do.
		(k) Tapti-Valley . .	5′ 6″	156	Branch line Company under rebate terms.
		(l) Ahmedabad-Paranji	3′ 3⅜″	89	Do.
		(m) Champaner-Shivrajpur-Pani Light.	2′ 6″	31	Do.
		(n) Godhra-Lunavada .	2′ 6″	25	Do.
		(o) Nadiad-Kapadvanj .	2′ 6″	28	Do.

* Receives land only from Government.

Railway system. Name. 1	Railway system. Worked by 2	Lines comprised in the system. Name. 3	Gauge. 4	Route mileage. 5	Owned by 6
		CLASS I RAILWAYS—*contd.*			
5. Eastern Bengal	State	(*a*) Eastern Bengal	5′ 6″	846	State.
		(*b*) Eastern Bengal	3′ 3⅜″	1,038	Do.
		(*c*) Eastern Bengal	2′ 6″	17	Do.
		(*d*) Cooch Behar State	3′ 3⅜″	33	Indian State.
		(*e*) Sara-Sirajganj	5′ 6″	54	Branch line Company under rebate terms.
		(*f*) Khulna-Bagerhat	2′ 6″	20	Do.
6. East Indian	State	(*a*) East Indian	5′ 6″	4,324	State.
		(*b*) Cawnpore-Bur h w a l link.*	3′ 3⅜″	66	Do.
7. Great Indian Peninsula.	State	(*a*) Great Indian Peninsula.	5′ 6″	3,122	State.
		(*b*) Darwha-Pusad	2′ 6″	43	Do.
		(*c*) Bhopal-Itarsi	5′ 6″	57	Jointly owned by State and Indian State.
		(*d*) Bhopal-Ujjain	5′ 6″	113	Indian State.
		(*e*) Bina-Goona-Baran	5′ 6″	147	Do.
		(*f*) Dhond-Baramati	2′ 6″	27	Branch line Company under rebate terms.
		(*g*) Ellichpur-Yeotmal	2′ 6″	118	Do.
		(*h*) Pachora-Jamner	2′ 6″	35	Do.
		(*i*) Pulgaon-Arvi	2′ 6″	22	Do.
8. Jodhpur	Indian State	(*a*) Jodhpur-Hyderabad (British Section).	3′ 3⅜″	269	State.
		(*b*) Jodhpur	3′ 3⅜″	774	Indian State.
		(*c*) Mirpur Khas-Khadro	3′ 3⅜″	49	Company subsidized by the Government of India.†
9. Madras and Southern Mahratta.	Madras and Southern Mahratta Railway Company.	(*a*) Madras and Southern Mahratta.	5′ 6″	1,119	State.
		(*b*) Madras and Southern Mahratta.	3′ 3⅜″	1,712	Do.
		(*c*) Alnavar-Dandeli (Provincial).	3′ 3⅜″	19	Do.
		(*d*) Kolar Goldfields	5′ 6″	10	Indian State.
		(*e*) Kolhapur State	3′ 3⅜″	29	Do.
		(*f*) Sangli State	3′ 3⅜″	5	Do.
		(*g*) Tenali-Repalle	5′ 6″	22	District Board.
		(*h*) West of India Portuguese.	3′ 3⅜″	51	Foreign Country.
10. Mysore State	Indian State	(*a*) Bangalore-Harihar	3′ 3⅜″	210	Indian State.
		(*b*) Hindupur (Yesvantpur-Mysore Frontier).	3′ 3⅜″	51	Do.
		(*c*) Mysore	3′ 3⅜″	338	Do.
		(*d*) Kolar District	2′ 6″	64	Do.
		(*e*) Tarikere-N a r a s i m-harajapura Tramway.	2′ 0″	27	Do.
		(*f*) Bangalore-Chik Ballapur Light.	2′ 6″	39	Company guaranteed by Indian State.
11. Nizam's State	Nizam's State Railway.	(*a*) Bezwada Extension	5′ 6″	21	State.
		(*b*) Dronachellam (Dhone)-Kurnool-British Frontier.	3′ 3⅜″	37	Do.
		(*c*) Nizam's State	5′ 6″	666	Indian State.
		(*d*) Nizam's State	3′ 3⅜″	636	Do.

* Under running power agreement, the B. and N.-W. Railway Company run and haul their trains and traffic over this line.

† Receives land only from Government.

RAILWAY SYSTEM.		LINES COMPRISED IN THE SYSTEM.			
Name. 1	Worked by 2	Name. 3	Gauge. 4	Route mileage. 5	Owned by 6
		CLASS I RAILWAYS—*concld.*			
12. North Western	State	(a) North Western	5′ 6″	5,651*	State.
		(b) Kalka-Simla	2′ 6″	60	Do.
		(c) Kangra-Valley	2′ 6″	88	Do.
		(d) Kohat-Thal	2′ 6″	62	Do.
		(e) Mari-Indus Kalabagh-Bannu and Laki-Pezu-Tank-Manzai.	2′ 6″	157	Do.
		(f) Zhob Valley (Fort Sandeman Khanai).	2′ 6″	174	Do.
		(g) Bahawalnagar Fort-Abbas-Kut-al-Imara.	5′ 6″	151	Indian State.
		(h) Jammu and Kashmir (Indian State Section).	5′ 6″	16	Do.
		(i) Jind-Panipat (Indian State Section).	5′ 6″	26	Do.
		(j) Khanpur-Chachran	5′ 6″	22	Do.
		(k) Ludhiana-Dhuri Jakhal.	5′ 6″	79	Do.
		(l) Rajpura-Bhatinda	5′ 6″	108	Do.
		(m) Sirhind-Rupar	5′ 6″	31	Do.
		(n) Hoshiarpur-Doab (Jullundur Mukerian).	5′ 6″	45	Branch line Company under rebate terms.
		(o) Hoshiarpur-Doab (Phagwara-Rahon).	5′ 6″	46	Do.
		(p) Mandra-Bhaun	5′ 6″	47	Do.
		(q) Sialkot Narowal	5′ 6″	39	Do.
		(r) Jacobabad-Kashmor.	2′ 6″	76	Do.
		(s) Larkana-Jacobabad	2′ 6″	53	Do.
13. Rohilkund and Kumaon.	Rohilkund and Kumaon Railway Company.	(a) Lucknow-Bareilly	3′ 3⅜″	311	State.
		(b) Rohilkund and Kumaon.	3′ 3⅜″	259	Company subsidized by the Government of India.§
14. South Indian	South Indian Railway Company.	(a) South Indian	5′ 6″	600	State.
		(b) South Indian	3′ 3⅜″	1,506	Do.
		(c) Nilgiri	3′ 3⅜″	29	Do.
		(d) Travancore (British Section including Shencottah-Quilon Section).	3′ 3⅜″	108	Do.
		(e) Morappur-Hosur	2′ 6″	73	Do.
		(f) Tirupattur-Krishnagiri.	2′ 6″	26	Do.
		(g) Shoranur-Cochin	5′ 6″	65	Indian State.
		(h) Travancore (Indian State Section).	3′ 3⅜″	40	Do.
		(i) Podanur-Pollachi	3′ 3⅜″	25	District Board.
		(j) Tinnevelly-Tiruchendur.	3′ 3⅜″	38	Do.
		(k) Peralam-Karaikkal	3′ 3⅜″	15	Foreign Country.
		(l) Pondicherry	3′ 3⅜″	8	Do.
		CLASS II RAILWAYS.			
1. Barsi Light	Barsi Light Railway Company.	Barsi Light	2′ 6″	203	Company subsidized by the Government of India and Indian State.†
2. Bengal Dooars	Bengal-Dooars Railway Company.	(a) Bengal Dooars	3′ 3⅜″	40	‖ Company subsidized by the Govt. and by District Board.
		(b) Bengal Dooars Extensions.	3′ 3⅜″	121	Company subsidized by the Government of India.‡
3. Bhavnagar State	Indian State	Bhavnagar State	3′ 3⅜″	307	Indian State.
4. Bikaner State	Do.	Bikaner State	3′ 3⅜″	852	Do.

* Includes 48 miles of Shahdara-Narowal guaranteed by Punjab Government.
† Receives land only from Government and Indian State.
‡ Receives land only from Government.
§ Receives land only from Government. The guarantee of interest and subsidy ceased from 1st January 1885 and 31st December 1894 respectively.
‖ Land for the original line is provided by the Government free of cost.

Railway system.		Lines comprised in the system.			
Name. 1	Worked by 2	Name. 3	Gauge. 4	Route mileage. 5	Owned by 6
CLASS II RAILWAYS—*concld.*					
5. Darjeeling Himalayan	Darjeeling Himalayan Railway Company.	(a) Darjeeling Himalayan.	2′ 0″	51	Company subsidized by Government.
		(b) Darjeeling Himalayan Extensions.	2′ 0″	95	Branch line Company under rebate terms.
6. Dibru-Sadiya .	Assam Railways and Trading Company.	(a) Dibru-Sadiya . .	3′ 3⅜″	86	Company subsidized by Government.*
		(b) Ledo and Tikak-Margherita Colliery.	3′ 3⅜″	5	Unassisted Company.
7. Gaekwar's Baroda State.	Indian State . .	(a) Gaekwar's Baroda State.	3′ 3⅜″	255	Indian State.
		(b) Khijadiya Dhari	3′ 3⅜″	37	Do.
		(c) Prachi Road Kodinar	3′ 3⅜″	16	Do.
		(d) Bodeli Chhota Udaipur.	2′ 6″	23	Do.
		(e) Gaekwar's Baroda State.	2′ 6″	333	Do.
8. Gondal . . .	Do.	(a) Gondal . . .	3′ 3⅜″	126	Do.
		(b) Jetalsar-Rajkot .	3′ 3⅜″	46	Do.
		(c) Porbandar State .	3′ 3⅜″	41	Do.
9. Jaipur State . .	Do.	Jaipur State . .	3′ 3⅜″	216	Do.
10. Jamnagar and Dwarka	Jamnagar and Dwarka Railway Company.	(a) Jamnagar . .	3′ 3⅜″	60	Do.
		(b) Okhamandal . .	3′ 3⅜″	37	Do.
		(c) Jamnagar-Dwarka .	3′ 3⅜″	75	Branch line Company under guarantee and rebate terms.†
11. Junagad State . .	Indian State . .	Junagad State . .	3′ 3⅜″	229	Indian State.
12. Morvi	Do.	Morvi	3′ 3⅜″	132	Do.
13. Shahdara (Delhi) Saharanpur Light.	Shahdara (Delhi) Saharanpur Light Railway Company.	Shahdara (Delhi) Saharanpur Light.	2′ 6″	93	Company subsidized by Government.‡
CLASS III RAILWAYS.					
1. Ahmadpur-Katwa .	Ahmadpur-Katwa Railway Company.	Ahmadpur-Katwa .	2′ 6″	32	Branch line Company under guarantee terms.
2. Arrah-Sasaram Light	Arrah-Sasaram Light Railway Company.	Arrah-Sasaram Light .	2′ 6″	65	Company subsidized by District Board.
3. Bankura-Damoodar River.	Bankura-Damoodar River Railway Company.	Bankura-Damoodar River.	2′ 6″	60	Branch line Company under guarantee terms.
4. Baraset-Basirhat Light.	Baraset-Basirhat Railway Company.	Baraset-Basirhat Light .	2′ 6″	52	Company subsidized by District Board.
5. Bengal Provincial .	Bengal Provincial Railway Company.	(a) Bengal Provincial .	2′ 6″	33	Unassisted Company.
		(b) Dasghara-Jamalpurgunj.	2′ 6″	8	Branch line Company under guarantee terms.
6. Bukhtiarpur-Bihar Light.	Bukhtiarpur-Bihar Light Railway Company.	Bukhtiarpur-Bihar Light	2′ 6″	33	Company subsidized by District Board.
7. Burdwan-Katwa .	Burdwan-Katwa Railway Company.	Burdwan-Katwa . .	2′ 6″	33	Branch line Company under guarantee terms.
8. Cutch State .	Indian State . .	Cutch State . . .	2′ 6″	72	Indian State.
9. Dehri-Rohtas Light .	Dehri-Rohtas Light Railway Company.	Dehri-Rohtas Light .	2′ 6″	26	Company subsidized by District Board.
10. Dholpur State . .	Indian State . . .	Dholpur State . .	2′ 6″	56	Indian State.

* Subsidy from Assam Government ceased with effect from 1920-21; receives land only from Government.
† Financed on rebate terms given by the Jamnagar Durbar.
‡ Receives only land from Government.

Railway system.		Lines comprised in the system.			
Name.	Worked by	Name.	Gauge.	Route mileage.	Owned by
1	2	3	4	5	6
CLASS III RAILWAYS—*concld.*					
11. Futwah-Islampur	Futwah-Islampur Light Railway Company.	Futwah-Islampur	2′ 6″	27	Branch line Company under guarantee terms.
12. Gwalior Light	Indian State	Gwalior Light	2′ 0″	295	Indian State.
13. Howrah-Amta Light	Howrah-Amta Light Railway Company.	Howrah-Amta Light	2′ 0″	44	Company subsidized by District Board.
14. Howrah-Sheakhala Light.	Howrah-Sheakhala Light Railway Company.	Howrah-Sheakhala Light	2′ 0″	20	Do.
15. Jagadhri Light	Jagadhri Light Railway Company.	Jagadhri Light	2′ 0″	3	Unassisted Company.
16. Jorhat	River Steam Navigation Company and India General Navigation and Railway Company.	Jorhat	2′ 0″	32	State.
17. Kalighat-Falta	Kalighat-Falta Railway Company.	Kalighat-Falta	2′ 6″	26	Branch line Company under guarantee terms.
18. Kulasekarapatnam Light.†	East India Distilleries and Sugar Factories.	Kulasekarapatnam Light	2′ 0″	27	Unassisted Company.
19. Matheran Light	Matheran Steam Tramway Company.	Matheran Light	2′ 0″	13	Company subsidized by the Government of India. *
20. Tezpore-Balipara Light.	Tezpore-Balipara Steam Tramway Company.	Tezpore-Balipara Light	2′ 6″	20	Company subsidized by District Board.
21. Udaipur-Chitorgarh (now Mewar State).	Indian State	Udaipur-Chitorgarh	3′ 3⅜″	146	Indian State.

* Receives land and rebate from Government.
† Closed for traffic from 4th February 1940.

APPENDIX B.

Resolution regarding the separation of Railway from General Finances, adopted by the Legislative Assembly on the 20th September 1924.

" This Assembly recommends to the Governor General in Council that in order to relieve the general budget from the violent fluctuations caused by the incorporation therein of the railway estimates and to enable railways to carry out a continuous railway policy based on the necessity of making a definite return to general revenues on the money expended by the State on Railways—

(1) The railway finances shall be separated from the general finances of the country and the general revenues shall receive a definite annual contribution from railways which shall be the first charge on the net receipts of railways.

(2) The contribution shall be based on the capital at charge and working results of commercial lines, and shall be a sum equal to one per cent. on the capital at charge of commercial lines (excluding capital contributed by companies and Indian States) at the end of the penultimate financial year *plus* one-fifth of any surplus profits remaining after payment of this fixed return, subject to the condition that, if in any year railway revenues are insufficient to provide the percentage of one per cent. on the capital at charge surplus profits in the next or subsequent years will not be deemed to have accrued for purposes of division until such deficiency has been made good.

The interest on the capital at charge of, and the loss in working, strategic lines shall be borne by general revenues and shall consequently be deducted from the contribution so calculated in order to arrive at the net amount payable from railway to general revenues each year.

(3) Any surplus remaining after this payment to general revenues shall be transferred to a railway reserve; provided that if the amount available for transfer to the railway reserve exceeds in any year three crores of rupees only two-thirds of the excess over three crores shall be transferred to the railway reserve and the remaining one-third shall accrue to general revenues.

(4) The railway reserve shall be used to secure the payment of the annual contribution to general revenues; to provide, if necessary, for arrears of depreciation and for writing down and writing off capital; and to strengthen the financial position of railways in order that the services rendered to the public may be improved and rates may be reduced.

(5) The railway administration shall be entitled, subject to such conditions as may be prescribed by the Government of India, to borrow temporarily from the capital or from the reserves for the purpose of meeting expenditure for which there is no provision or insufficient provision in the revenue budget subject to the obligation to make repayment of such borrowings out of the revenue budgets of subsequent years.

(6) A Standing Finance Committee for Railways shall be constituted consisting of one nominated official member of the Legislative Assembly who should be chairman and eleven members elected by the Legislative Assembly from their body. The members of the Standing Finance Committee for Railways shall be *ex-officio* members of the Central Advisory Council, which shall consist, in addition, of not more than one further nominated official member, six non-official members selected from a panel of eight elected by the Council of State from their body and six non-official members selected from a panel of eight elected by the Legislative Assembly from their body.

The Railway Department shall place the estimate of the railway expenditure before the Standing Finance Committee for Railways on some date prior to the date for the discussion of the demand for grants for railways and shall, as far as possible, instead of the expenditure programme revenue show the expenditure under a depreciation fund created as per the new rules for charge to capital and revenue.

(7) The railway budget shall be presented to the Legislative Assembly if possible in advance of the general budget and separate days shall be allotted for its discussion, and the Member in charge of Railways shall then make a general statement on railway accounts and working. The expenditure proposed in the railway budget, including expenditure from the depreciation fund and

the railway reserve, shall be placed before the Legislative Assembly in the form of demands for grants. The form the budget shall take after separation, the detail it shall give and the number of demands for grants into which the total vote shall be divided shall be considered by the Railway Board in consultation with the proposed Standing Finance Committee for Railways with a view to the introduction of improvements in time for the next budget, if possible.

(8) These arrangements shall be subjected to periodic revision but shall be provisionally tried for at least three years.

(9) In view of the fact that the Assembly adheres to the resolution passed in February 1923, in favour of State management of Indian Railways, these arrangements shall hold good only so long as the East Indian Railway and the Great Indian Peninsula Railway and existing State-managed Railways remain under State management. But if in spite of the Assembly's resolution above referred to Government should enter on any negotiations for the transfer of any of the above railways to Company management such negotiations shall not be concluded until facilities have been given for a discussion of the whole matter in the Assembly. If any contract for the transfer of any of the above railway to Company management is concluded against the advice of the Assembly, the Assembly will be at liberty to terminate the arrangements in this Resolution.

Apart from the above convention this Assembly further recommends—

(i) that the railway services should be rapidly Indianised, and further that Indians should be appointed as Members of the Railway Board as early as possible, and

(ii) that the purchases of stores for the State Railways should be undertaken through the organisation of the Stores Purchase Department of the Government of India."

APPENDIX C.

Office of the Railway Department (Railway Board) and attached offices on 31st March 1940.

The Hon'ble Sir Andrew Clow, C.S.I., C.I.E., I.C.S., Member of Council of the Governor General.

Railway Board.

The Hon'ble Sir Guthrie Russell, K.C.I.E.	Chief Commissioner of Railways.
Mr. B. M. Staig, C.S.I., I.C.S.	Financial Commissioner of Railways.
Mr. J. H. F. Raper	Member.
Khan Bahadur Muzaffar Hussain	Member.
Mr. T. S. Sankara Aiyar, C.I.E.	Director, Finance.
Mr. E. Ingoldby, A.M.I.C.E., M.I.L.E.	Director, Mechanical Engineering.
Mr. S. E. L. West, O.B.E., V.D.	Director, Traffic (*Offg.*).
Lt.-Col. H. W. Wagstaff, M.C., R.E.	Director, Establishment.
Mr. A. M. Sims	Director, Civil Engineering (*Offg.*).
Mr. A. C. Griffin, O.B.E.	Secretary.
Mr. Yaqub Shah	Deputy Director, Finance.
Mr. J. D. Michael	Deputy Director, Establishment.
Mr. J. W. C. Holt	Deputy Director, Traffic (Transportation) (Temporary).
Mr. T. G. Creighton	Deputy Director, Mechanical (Stores) (Temporary).
Mr. A. K. Basu	Deputy Director, Traffic (Commercial).
Mr. H. M. Jagtiani	Deputy Director, Traffic (General) (Temporary).
Mr. N. C. Watney	Deputy Director, Mechanical Engineering (*Offg.*).
Khan Bahadur K. Ubaidullah	Assistant Director, Finance (Temporary).
Mr. E. C. Rundlett	Assistant Secretary.

Attached Officers.

Mr. D. Stewart, O.B.E.	Joint Timber Advisory Officer, Railway and Defence Departments.
Mr. K. C. Srinivasan	Officer on Special Duty with the Railway Board.

Attached Offices.

(Central Standards Office.)

Mr. J. M. D. Wrench, C.I.E.	Chief Controller of Standardization.
Mr. W. Hood	Deputy Chief Controller (Civil).
Mr. J. Humphries	Deputy Chief Controller (Mechanical).
Mr. W. A. Nightingale	Assistant Chief Controller (Mechanical).
Mr. S. L. Kumar	Assistant Chief Controller (Civil).
Mr. P. S. Venkataraman	Assistant Chief Controller (Specifications and Records).
Mr. W. E. Gelson	Officer on Special Duty.
Mr. E. A. Blackwood	Officer on Special Duty.

Central Publicity Bureau.

Mr. G. T. Tait	Central Publicity Officer, Indian State Railways.
Mr. P. W. Sullivan	Assistant Publicity Officer, Indian State Railways.

Overseas Bureau.

Mr. A. E. Tylden Pattenson	Manager, Indian Railways Bureau, London.

Office of the Controller of Railway Accounts.

Mr. D. Colin Campbell	Controller of Railway Accounts.
Mr. R. V. Ramchandani	Deputy Controller of Railway Accounts.

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